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ABSTRACT

Attribution theory supports the notion that teachers respond to student behavior based upon their own beliefs regarding the causation of behavior. This study examined differences in male and female teachers' attributions and beliefs in relation to gender and success of their students. Subjects, 250 high school teachers, half male and half female, completed a 2-part survey to measure their attributions of student success or failure in relation to gender-associated behaviors. The teachers were also asked to identify the gender of students believed to be most successful within the teacher's content area. Findings indicated over half of the female teachers and a third of the male teachers reported female students to be more successful in their content areas. Both male and female teachers reported boys to be most successful only in traditional male subjects, such as metal shop and woodworking, whereas female students were identified as most successful in all content areas with the exception of these traditionally male dominant areas. The results implied that male and female students are receiving different educational experiences based upon a combination of their own ability and what their teachers believe to be appropriate gender-based behavior. It was recommended that educators be made aware of any sex-biases which influence their behavior toward students and that schools provide students with a balance of male and female teachers from K-12. Findings are reported in 86 tables, which comprise the bulk of the document. (Contains 20 references.) (LL)

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Teachers' Attributions and Beliefs in Relation to Gender and Success of Students

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Paper

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Teachers' Attributions and Beliefs in Relation to Gender and Success of Students

INTRODUCTION

In recent years, studies of teachers' beliefs about causation of their students' successes or failures have received increased attention by researchers (Bar-Tal & Guttmann, 1981; Graham, 1984; Peterson and Barger, 1989). How teachers perceive why a student is behaving in any given situation, in other words, to what teachers attribute the causes of student behavior, becomes important in understanding how teacher expectancies effect student performance in the classroom (Darley and Fazio, 1980; Fennema, 1987; Peterson and Barger, 1984). Attribution theory suggests that what a teacher believes to be the reason for students' behavior will influence how that teacher responds to that behavior (Weiner, 1979). The present study explores the differences in how male and female high school teachers attribute causation of student success or lack of success.

Within the classroom, teachers are constantly attending to a rapid flow a social interactions which are interpreted through a rich knowledge base shaped by past experience. This knowledge base consists of not only information organized in schematic, cognitive structures, but is also represented as beliefs or theories. The types of teachers' theories that may have the most impact on student achievement are those that deal with the general causes of human behavior (Weiner, 1974; Nisbett & Ross, 1980). How teachers perceive why a student is behaving in any given manner, in other words, to what teachers attribute the causes of student behavior becomes important in understanding how teacher expectancies effect student performance in the classroom (Darley & Fazio, 1980; Fennema, 1987; Peterson & Barger, 1984).

A plausible explanation for the "whys" of student and teacher behavior was advanced by Bernard Weiner (1979) in his extrapolation of attribution theory. Basic to attribution theory is the concept that humans seek understanding as opposed to a strict pleasure/pain motivational schema. Accompanying the need

to understand is a need to ascribe meaning to the actions of others. Weiner asserts that individuals seek the fulfillment of these needs knowing that successful performance of any given activity will most likely result in either personal or interpersonal satisfaction. Weiner illustrates causes of success and failure with a matrix, as shown in Table 1.

TABLE 1
Causes of Success and Failure

	Internal Stimulus		External Stimulus	
Controllability	Stable	Unstable	Stable	Unstable
Uncontrollable	Ability	Mood	Task difficulty	Luck
Controllable	Typical effort	Immediate effort	Teacher bias	Unusual help from others

Attribution theory suggests that when a person experiences a success or failure, that individual needs to attribute the result to either an internal or external, controllable or uncontrollable, stable or unstable causation. If a student ascribes lack of success on a test to lack of ability in the content area and the teacher also considers the student to have low ability, then both will assume behaviors that will reinforce those beliefs. When a teacher considers this situation, he or she will usually feel sympathetic and the reason attributed to the student's occasional success will be luck or help from others.

On the other hand, a teacher is likely to be surprized if a hard-working student, perceived by the teacher to have average or high ability, fails a test. If the teacher discovers the student failed because of lack of effort, the reaction will be anger or increased pressure to perform. For low-ability or perceived low-ability students, maintaining their self-esteem dictates behaviors that allow them the best possible self-image. They will choose not to study, not to listen in class, not to take notes, or not to

do assignments because if they remove themselves from the educational process then they do not need to feel a personal lack of success. If they choose not to play the game, then they do not place themselves at emotional risk of failure.

For teachers, the dilemma is reversed. Many teachers find that the amount of personal gratification gleaned from student success is highest from a student who has shown low ability, but suddenly "blossoms". Teachers receive more intrinsic reward working with students who succeed, partly because they see it as a reflection of their own ability to be a good teacher. When working with students who have learned not to get involved in classroom activities, the amount of intrinsic return relative to the amount of energy expended is less for teachers than working with involved students. If a teacher can ascribe a student's failure to his or her lack of ability or effort, then the teacher does not have to expend emotional energy in self-examination. If, however, a motivated teacher is given a high-ability or high-performing student who suddenly plummets in performance, the teacher is forced to ask why. If the teacher can attribute the fall to extraneous causation (e.g., drugs, puberty, environment), then the teacher's own schema would not be threatened. But if a teacher suddenly has one or several students suddenly fail, then not only the teacher but also parents and possibly administrators will begin asking why (Prawat, Byers, & Anderson, 1983).

The very act of helping has many attributions. Ickes & Kidd (1976) established that the tendency to help an individual is dependent upon the perceived causation of the need for help. If the need for assistance is perceived as being outside the realm of control of the person seeking assistance (e.g., handicapped, mental deficiency), that assistance will be offered much more quickly than if the reason is perceived to be within the control of the seeker (e.g., drunkenness, laziness). Therefore, if a teacher attributes factors outside of the control of the student as the reason why a student needs assistance, the message communicated will be different than the message communicated if the teacher perceives the student as being able to do the work but

in need of guidance. Intuitively, an educator will choose a different strategy for assisting a student based upon attribution ascribed to the need for assistance.

An analysis of affective teacher reactions to student success and failure conducted by Prawat et al. (1983) revealed that teachers felt more anger when responding to a high-ability student failure and more sympathy when responding to a low-ability student failure. Teachers felt more pride in the success of a student who suddenly started expending more effort and succeeded, and least prideful when a student with a history of expending little effort failed for lack of trying. The researcher's assumption was that teachers might justifiably feel that they had helped to bring about hard-working students' success, but had little personal investment in students who did not expend effort and had never done so. Teacher guilt was experienced more for the failure of high-ability students than low-ability students. The greatest guilt was expressed concerning students who demonstrated a sudden drop in effort and success because then teachers questioned whether a lack of teaching expertise might have contributed to student failure.

Covington & Omelich (1979) assert that "Teachers encourage achievement through effort, yet many students attempt to avoid the implication that they lack ability by not trying." When one considers what environmental factors teachers and students have under their control, it is easy to understand the frustration that teachers feel when working with students who don't put forth effort and the frustration students feel trying to maintain a positive self-image in classroom situations out of their control. As a result, teachers do not feel responsible for students who don't achieve and are less likely to put forth extra effort to help these students, since the reason for their perceived lack of success is low-ability or other causes outside the teacher's influence. Unsuccessful students must try to construct a self-image based on learned attributions (e.g., a lack of success is due to low ability, inability to understand instruction, drug reliance, etc.). Graham (1984) reported that when a teacher

exhibits anger for a perceived student failure, the student thinks the reason for failure was under the student's control (e.g.,the student could succeed by working harder). If the teacher exhibits sympathy, the student feels the reason for failure was not under his or her control (e.g., the student did not have the ability to succeed).

Attribution theory supports the notion that we all attribute the actions of other people to our personal beliefs and attitudes. Furthermore, we assume that other people's actions result from beliefs and attitudes held about themselves and others. It is an interactional model with each side of the communication depending upon accurately judging the beliefs, attitudes, and expectations of the other. This communication model works as long as the assumptions about other people's beliefs, attitudes, and abilities are accurate.

If there is a link between teacher perception and teacher action as explained by attribution theory, then it can be assumed that teacher attitudes and beliefs impact the treatment of students. If teachers hold theories as to what is appropriate behavior for girls as distinguished from appropriate behavior for boys, then teachers will react to their students based on those beliefs.

An extensive review of the literature showed that most studies dealing directly with teacher attributions have not included student gender as a variable. Of the studies that have, most found that teachers do attribute different causation and/or treat students differently depending upon the sex of the student (Fennema, 1987; Sadker and Sadker; 1986). However, none of these studies included both student and teacher gender as variables. This study adds substantially to the research base by examining the differences in male and female teachers' attributions and beliefs in relation to the success or lack of success of male and female students.

OBJECTIVES OF THE STUDY

This study examined differences in male and female teachers' attributions and beliefs in relation to gender and success of their students. Three questions guided this study:

1) Who do teachers believe are their most and least successful students - males or females?

2) Do male and female teachers attribute causation of success or lack of success differently for male and female students?

3) Do male and female teachers believe that there are differences in the characteristics of their most and least successful male and female students?

A review of literature found limited descriptive research addressing these questions. To what teachers attribute the causes of student behavior becomes important in understanding how teacher expectancies effect student performance in the classroom.

DATA SOURCE

The population of the study was 250 educators, half male and half female, teaching grades 9-12 in southeastern Ohio during the 1992-1993 school year. These individuals were randomly selected from published lists of faculty teaching in 24 area high schools. All teachers were mailed a cover letter explaining the study, a demographic information form, and a two-part survey used to measure participants' attributions of student success or failure in relation to gender-associated behaviors. The first part was an adaptation of the Broverman (1970) sex-stereotype semantic differential, using a Likert scale with values ranging from 1 to 7 to indicate strength of agreement with descriptive adjectives. The adjectives had both masculine and feminine poles and male and female values (see Rosencrantz, Vogel, Bee, Broverman, & Broverman, 1968). The second part of the survey included a set of open-ended questions asking teachers to provide written descriptions of their most and least successful male and female students. Teachers were also asked to identify the gender of students believed to be most successful within the teacher's

content area. Eighty-six (34%) of the teachers, 39 males and 47 females, returned usable data sets and became the participants of the study.

METHODOLOGY

The research design chosen for this study includes both quantitative and qualitative methods. Yin (1984) suggests that varied sources of evidence gives a researcher a broader perspective of attitudinal issues. Since this study investigated teacher attitudes, a variety of data were collected and analyzed to provide multiple measures of evidence which increase construct validity.

Quantitative results were obtained by comparing findings of sex-stereotype surveys which described attributions of most and least successful male and female students. Several statistical methods were used to analyze quantitative data, which were sorted by both sex of student and sex of teacher. Standard deviations, means, and *t*-test results were obtained on each subset of data. Paired *t*-tests and ANOVA's were performed to discern any differences in responses between either male and female students or male and female teachers. Correlation and regression analysis were performed to determine if any relationships existed between responses.

Data analysis of the qualitative portion of the survey began with categorizing and coding open-ended responses of male and female teachers describing their most and least successful male and female students. Categories were described as a second step of data analysis. Finally, the frequency of each category was determined and described. Follow-up interviews were conducted with a subset of 20 participants. A descriptive comparison of questionnaire and interview responses provided a reliability check for this portion of the study.

FINDINGS

Most Successful Students

The first research question addressed by this study was "Who do male and female teachers believe are their most successful students - males or females?" Teachers were asked, within their content area, to identify most successful students. Table 2 shows data obtained from the demographic section of the survey indicating the content areas in which participants taught. This data provides a context for understanding responses of male and female teachers.

When teachers were asked to indicate whether male or female students were most successful in their content areas, responses revealed that 55% of female teachers and 34% of male teachers believed female students to be most successful. Thirteen percent of female teachers and 26% of male teachers reported male students to be most successful. Thirty-two percent of female teachers and 41% of male teachers reported there was no difference in the success ratio between male and female students or that the ratio varied from year to year. Both male and female teachers reported boys to be most successful only in traditional male subjects, such as metal shop and woodworking, whereas female students were identified as most successful in all content areas with the exception of traditionally male-dominated subjects.

Table 3 shows the content areas in which teachers believed male and female students to be most successful. Males were seen as most successful only in typically masculine areas, whereas females were thought to be most successful in all content areas except typically masculine subjects.

Table 2
Content Areas of Teachers

Male Teachers	Female Teachers
Agriculture Education	Accelerated Biology
Agri-Science	Accounting
American Government	Advanced English
American History	Advanced Publications
Business	Algebra
Business Math	Anatomy
Calculus	Art
Chemistry	Beginning Publication
Civil War	Biology
College Prep. English	Business
Computer Applications	Calculus
Drafting	Ceramics
Drama	Chemistry
Economics	College Prep. English
English	Computer Science
General Math	Drawing
General Science	Earth Science
Geography	Economics
Geometry	English
Health	French
Library	General Science
Math Analysis	Health
Mathematics	Journalism
Metalworking	Latin
Occupational Work	Library Skills
Experience	Library Skills
Physical Education	Math
Psychology	Medical Science
Physics	Painting
Psychology	Physical Education
Sociology	Reading
Speech	Remedial Math
Technology	Social Studies
Woodworking	Spanish
World History	Special Ed.
	Trigonometry
	U.S. History
	Vocational Academics
	World Geography
	Writing
	Writing Composition
	Zoology

TABLE 3
Content Areas of Most Successful Students by Sex

Males Most Successful	Females Most Successful
Agriculture Education	Accelerated Biology
Agriculture	Accounting
Beginning Publication	American Government
Drafting	Anatomy
Health	Biology
Metalworking	Business
Physical Education	Business Math
Technology	Calculus
Woodworking	Chemistry
	College Prep. English
	Computer Applications
	Economics
	English
	French
	General Math
	General Science
	Geometry
	Journalism
	Latin
	Library Skills
	Math
	Math Analysis
	Medical Science
	Psychology
	Physics
	Sociology
	Spanish
	U.S. History
	World Geography
	World History
	Writing
	Writing Composition
	Zoology

Several teachers who believed females to be most successful commented on why female students were better in either their particular content areas or school in general. A female English teacher reported, "Girls are generally more successful simply because they're more cooperative about doing the work." A male math teacher asserted, "In high school, girls are definitely the most successful. They are more mature and realize the importance of achievement (overall)." A female Latin teacher recalled, "A few years ago I had a class of six girls in Latin IV. They were fabulous. They were curious, hard-working, and intelligent. They wanted to do everything. Even the most (seemingly) mundane tasks became interesting because they wanted to do them." Teachers who

believed male students to be most successful did not offer comments as to why they thought males were better in their particular content areas.

Several teachers cited students' professional careers or continuance to college as evidence of success. Some teachers mentioned most successful students by name and cited their careers, accomplishments and colleges attended. Only female most successful students were described as such because of having children or being attractive or fashionable.

Differences in Characteristics of Most and Least Successful Male and Female Students

The second research question addressed by this study was "Do teachers believe that there are differences in the characteristics of their most and least successful male and female students? In reference to this question, teacher responses on the bipolar, sex-stereotype survey were examined using descriptive statistical methods. The survey instrument used a Likert scale with values ranging from 1 to 7 to indicate strength of agreement with descriptive adjectives, with a neutral value being 4. The adjectives had both masculine and feminine poles and male and female values (see Rosencrantz et al., 1968).

The following section of data analysis is divided into four parts. The first part compares how both male and female teachers described either most or least successful male or female students. The second part shows how either male or female teachers described either most or least successful male or female students. The third part compares descriptions of how either male or female teachers described most successful male or female students in relation to descriptions of least successful students of the same sex. The fourth part compares descriptions of how either male or female teachers described most successful male or female students in relation to descriptions of least successful students of the opposite sex.

ANOVA's, paired *t*-tests, correlations, and regression analyses were performed on the data in this section. Standard

deviations, means, and *t*-test values were also determined. The following outline illustrates the comparisons of data made in this section:

I. Responses by both male and female teachers describing either most or least successful male or female students

A. Most successful males described by male and female teachers
B. Most successful females described by male and female teachers
C. Least successful males described by male and female teachers
D. Least successful females described by male and female teachers
E. Semantic differential analyses
F. Summary of Findings

II. Responses by either male or female teachers describing either most or least successful male or female students

A. Most successful males to most successful females by male teachers
B. Most successful males to most successful females by female teachers
C. Least successful males to least successful females by male teachers
D. Least successful males to least successful females by female teachers
E. Summary of findings

III. Responses by either male or female teachers describing most successful male or female students in relation to descriptions of least successful students of the same sex

A. Most successful males to least successful males by male teachers
B. Most successful males to least successful males by female teachers
C. Most successful females to least successful females by male teachers
D. Most successful females to least successful females by female teachers
E. Summary of findings

IV. Responses by either male or female teachers describing most successful male or female students in relation to descriptions of least successful students of the opposite sex

A. Most successful males to least successful females by male teachers
B. Most successful males to least successful females by female teachers
C. Most successful females to least successful males by male teachers
D. Most successful females to least successful males by female teachers
E. Summary of findings

Responses by Both Male and Female Teachers Describing Either Most or Least Successful Male or Female Students Characteristics of Most Successful Male Students.

Table 4 shows how male and female teachers rated their most successful male students on a Likert scale sex-role stereotype survey. Both male and female teachers gave statistically significant ($p<.01$ or $p<.05$) descriptions of their most successful male students as being not easily influenced, talkative, active,

TABLE 4

Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term

All Teachers - Most Successful Male Students

		Male Teachers			Female Teachers		
		Mean	SD	*t*(39)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	4.5	2.1	1.6	4.7	2.1	2.3*
2.	Not independent/very independent	4.7	2.2	1.9	4.7	2.3	1.9
3.	Very objective/very subjective	3.6	1.9	-1.2	3.8	1.6	-0.7
4.	Very easily influenced/not easily influenced	4.7	2.0	2.3*	6.1	0.8	18.1**
5.	Very submissive/very dominant	4.5	1.7	1.9	5.2	1.2	6.8**
6.	Not at all talkative/very talkative	4.5	1.2	2.7**	4.7	1.6	2.8**
7.	Very active/very passive	3.4	1.9	-1.9	3.0	1.4	-4.4**
8.	Not at all emotional/very emotional	3.7	1.1	-1.5	4.0	1.4	-0.2
9.	Very interested in own appearance Not at all interested in own appearance	3.2	1.5	-3.6**	3.6	1.7	-1.4
10.	Not at all adventurous/very adventurous	5.3	1.2	7.2**	5.5	1.1	9.6**
11.	Very aware of others' feelings Not at all aware of others' feelings	3.5	1.8	-1.7	3.4	1.6	-2.3*
12.	Not very competitive/very competitive	5.3	1.5	5.6**	6.1	0.8	16.6**
13.	Very sloppy in habits/very neat in habits	5.3	1.6	5.2**	5.8	1.4	8.3**
14.	Not at all self-confident/very self-confident	5.8	1.4	8.3**	6.3	0.6	27.4**
15.	Very loud/very quiet	4.8	1.1	4.9**	4.3	1.4	1.4
16.	Almost never acts as leader Almost always acts as leader	4.9	1.5	4.1**	5.7	1.4	8.1**
17.	Very gentle/very rough	3.4	1.2	-3.2**	3.1	1.2	-5.0**
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	4.2	1.4	0.9	5.2	1.5	5.2**
19.	Not at all dependent/very dependent	3.5	1.9	-1.6	2.4	1.3	-8.4**
20.	Very strong need for security Very little need for security	4.6	1.4	2.7*	5.2	1.3	6.3**

Scores above 4 indicate more agreement with the term on the right.

*p<.05 **p<.01

adventurous, competitive, neat, self-confident, acting as leaders, gentle, and having little need for security. Table 4 also shows means, standard deviations, and *t*-test results for most successful male students. Correlation and regression analyses revealed no statistically significant relationships between male and female teacher responses.

Table 5 shows paired *t*-test results for comparisons of male and female teacher responses to the survey. Significantly different responses were given for the following descriptors: easily influenced, dominant, competitive, neat, self-confident, acts as a leader, comfortable with being aggressive, dependent, and need for security. Female teachers described most successful males with higher values in all categories than male teachers.

TABLE 5
Paired *t*-test Results Comparing Male and Female Responses When Describing Most Successful Male Students

Descriptor	*t*(86)	*p*
Easily influenced	-3.9	.0003
Competitive	-3.7	.0006
Comfort with aggression	-3.6	.0009
Dependent	3.1	.0032
Acts as leader	-2.8	.0072
Need for security	-2.4	.0200
Self-confident	-2.1	.0380
Neat in habits	-2.1	.0433
Dominant	-2.0	.0469

Characteristics of Most Successful Female Students. When all teachers assigned values to descriptors of their most successful female students, sixteen areas of agreement were reached. Most successful female students were described as aggressive, not easily influenced, dominant, active, emotional, interested in their own appearance, aware of other's feelings, competitive, neat, self-confident, acting as leaders, gentle, not dependent, and secure. Table 6 shows means, standard deviations, and *t*-test results for most successful female students. Correlation and regression analyses revealed no statistically significant correlations between male and female teacher responses.

TABLE 6
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
All Teachers - Most Successful Female Students

		Male Teachers			Female Teachers		
		Mean	SD	*t*(39)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	4.5	1.5	2.3*	5.0	1.9	3.6**
2.	Not independent/very independent	4.7	1.5	3.1**	4.5	2.1	1.7
3.	Very objective/very subjective	3.7	1.8	-1.1	4.0	1.6	-0.1
4.	Very easily influenced/not easily influenced	5.0	1.7	3.8**	5.8	1.2	10.2**
5.	Very submissive/very dominant	4.5	1.3	2.4*	5.5	1.0	10.3**
6.	Not at all talkative/very talkative	4.7	1.2	3.7**	4.6	1.6	2.8**
7.	Very active/very passive	3.3	1.6	-2.8**	2.8	1.4	-5.9**
8.	Not at all emotional/very emotional	4.5	1.4	2.4*	5.0	1.2	5.8**
9.	Very interested in own appearance Not at all interested in own appearance	3.3	1.9	-2.3*	3.2	2.0	-2.5*
10.	Not at all adventurous/very adventurous	4.8	0.9	5.9**	5.4	1.0	9.4**
11.	Very aware of others' feelings Not at all aware of others' feelings	3.1	1.8	-3.2**	3.2	1.8	-3.1**
12.	Not very competitive/very competitive	5.6	1.3	7.6**	5.7	1.3	8.9**
13.	Very sloppy in habits/very neat in habits	5.7	1.2	9.2**	6.1	1.6	8.9**
14.	Not at all self-confident/very self-confident	4.8	1.6	3.1**	6.1	0.9	15.5**
15.	Very loud/very quiet	4.7	1.5	2.9**	4.0	1.7	0.2
16.	Almost never acts as leader Almost always acts as leader	4.8	1.4	3.5**	5.5	1.5	7.2**
17.	Very gentle/very rough	2.8	1.3	-5.4**	3.2	1.5	-3.7**
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	3.6	1.4	-1.7	5.1	1.6	4.4**
19.	Not at all dependent/very dependent	3.5	1.4	-2.1*	3.1	1.7	-3.6**
20.	Very strong need for security Very little need for security	4.4	1.2	2.3*	4.5	1.5	2.2*

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

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Table 7 displays paired *t*-test results comparing male and female teacher responses. Significantly different responses were given for the following descriptions: easily influenced, dominant, emotional, adventurous, self-confident, acts as a leader, and comfortable with being aggressive. Female teachers described most successful females with more extreme ratings than male teachers in all categories.

TABLE 7
Paired *t*-test Results Comparing Male and Female Responses When Describing Most Successful Female Students

Descriptor	*t*(86)	*p*
Dominant	-4.5	.0001
Self-confident	-5.0	.0001
Comfort with aggression	-4.2	.0001
Easily influenced	-2.4	.0193
Adventurous	-2.4	.0201
Acts as leader	-2.1	.0387
Emotional	-2.0	.0487

Characteristics of Least Successful Male Students. Least successful male students were described similarly by both male and female teachers in ten areas. They were described as being subjective, easily influenced, not interested in their own appearance, not aware of the feelings of others, not competitive, sloppy, not self-confident, never acting as leaders, rough, and comfortable with being aggressive. Table 8 shows means, standard deviations, and *t*-test results for least successful male students. Correlation and regression analyses revealed no correlations between male and female teacher responses.

Paired *t*-tests were performed on descriptions given by male and female teachers. Table 9 shows areas of statistically significant differences. Descriptions for least successful male students differed in the areas of dominance, interest in appearance, awareness of feelings of others, dependence, and need for security. Male and female teachers described least successful males on opposite ends of the scale on two categories. Male teachers described them as having a stronger need for security and

TABLE 8
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
All Teachers - Least Successful Male Students

		Male Teachers			Female Teachers		
		Mean	SD	*t*(39)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	3.1	2.4	-2.5*	3.7	2.3	-0.7
2.	Not independent/very independent	3.8	2.5	-0.4	4.3	1.9	1.1
3.	Very objective/very subjective	4.9	1.9	3.3**	5.4	1.5	6.2**
4.	Very easily influenced/not easily influenced	2.7	1.8	-4.7**	2.8	1.9	-4.2**
5.	Very submissive/very dominant	3.8	1.9	-0.7	4.9	1.7	3.7**
6.	Not at all talkative/very talkative	4.5	2.0	1.6	4.3	2.2	1.0
7.	Very active/very passive	3.8	1.9	-0.7	4.1	2.2	0.2
8.	Not at all emotional/very emotional	3.9	2.1	-0.4	3.5	1.9	-1.6
9.	Very interested in own appearance	5.0	1.6	4.0**	5.4	1.5	6.2**
	Not at all interested in own appearance						
10.	Not at all adventurous/very adventurous	3.4	1.6	-2.4*	3.9	1.9	-0.5
11.	Very aware of others' feelings	5.8	1.4	8.3**	5.0	1.7	3.8**
	Not at all aware of others' feelings						
12.	Not very competitive/very competitive	2.4	1.4	-7.4**	2.3	1.4	-7.8**
13.	Very sloppy in habits/very neat in habits	2.0	1.0	-13.1**	2.4	1.5	-6.9**
14.	Not at all self-confident/very self-confident	2.6	1.2	-7.6**	2.4	1.5	-7.0**
15.	Very loud/very quiet	3.5	1.9	-1.8	3.1	2.2	-2.6*
16.	Almost never acts as leader	2.3	1.5	-7.2**	2.2	1.2	-9.7**
	Almost always acts as leader						
17.	Very gentle/very rough	5.0	1.5	4.4**	5.3	1.6	5.3**
18.	Very uncomfortable about being aggressive	4.6	1.9	2.3*	5.4	1.8	5.1**
	Not at all uncomfortable about being aggressive						
19.	Not at all dependent/very dependent	4.9	1.4	4.4**	4.1	1.9	0.3
20.	Very strong need for security	3.3	1.4	-3.3**	4.2	1.8	0.6
	Very little need for security						

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

as being submissive as opposed to female teachers describing them as being more dominant with less need for security. Male teachers gave more extreme responses for not being aware of others' feelings and being more dependent. Female teachers gave a more extreme response for least successful males being less interested in their own appearance.

TABLE 9
Paired *t*-test Results Comparing Male and Female Responses When Describing Least Successful Male Students

Descriptor	*t*(86)	*p*
Dominant	-3.1	.0031
Interested in appearance	-2.0	.0469
Aware of others' feelings	2.4	.0207
Dependent	2.8	.0074
Need for security	-2.6	.0130

Characteristics of Least Successful Female Students. Teachers were in least agreement with descriptions of least successful female students with only six areas agreed upon. Least successful female students were described as being easily influenced, emotional, not aware of feelings of others, not competitive, never acting as leaders, and dependent. Table 10 shows means, standard deviations, and *t*-test results for least successful female students. Correlation and regression analyses revealed no statistically significant correlations between male and female teacher responses.

Paired *t*-tests were performed on descriptions given by male and female teachers. Table 11 shows areas of statistically significant differences. Male and female teachers gave significantly different responses in areas of aggressiveness, talkativeness, emotions, adventurousness, competitiveness, quiet/loud, gentle/rough, comfort with being aggressive, and need for security. Values assigned by male teachers for least successful female students were more extreme in the area of competition in that they ranked these students to be less competitive than did female teachers. Female teachers described

TABLE 10
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
All Teachers - Least Successful Female Students

		Male Teachers			Female Teachers		
		Mean	SD	*t*(39)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	2.9	2.1	-3.3**	4.4	2.5	1.0
2.	Not independent/very independent	3.9	2.2	-0.4	4.2	2.1	0.7
3.	Very objective/very subjective	4.4	1.8	1.5	4.7	1.8	2.8**
4.	Very easily influenced/not easily influenced	2.7	1.8	-4.8**	2.7	2.3	-3.8**
5.	Very submissive/very dominant	3.4	2.0	-1.93	0.9	2.4	-0.4
6.	Not at all talkative/very talkative	4.1	2.6	0.2	5.3	2.1	4.2**
7.	Very active/very passive	4.2	2.1	0.7	3.7	2.4	-0.7
8.	Not at all emotional/very emotional	4.9	1.9	3.2**	5.8	1.1	11.5**
9.	Very interested in own appearance Not at all interested in own appearance	3.8	1.7	-0.8	3.3	2.0	-2.4*
10.	Not at all adventurous/very adventurous	3.2	1.6	-3.1**	4.3	2.2	1.1
11.	Very aware of others' feelings Not at all aware of others feelings	4.8	1.5	3.4**	4.8	1.8	3.1**
12.	Not very competitive/very competitive	1.7	1.1	-14.0**	2.6	1.6	-5.8**
13.	Very sloppy in habits/very neat in habits	3.0	1.4	-4.6**	3.5	1.9	-1.6
14.	Not at all self-confident/very self-confident	2.1	1.1	-10.7**	2.5	1.4	-7.3
15.	Very loud/very quiet	4.3	2.3	1.0	3.4	2.3	-1.9
16.	Almost never acts as leader Almost always acts as leader	2.0	1.0	-12.2**	2.3	1.6	-7.4**
17.	Very gentle/very rough	3.7	1.9	-1.1	4.6	1.9	2.2*
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	3.8	2.0	-0.7	4.7	2.1	2.2*
19.	Not at all dependent/very dependent	4.7	1.8	2.4*	4.6	2.0	2.2*
20.	Very strong need for security Very little need for security	3.5	1.8	-1.5	2.6	1.6	-5.8**

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

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least successful females as more talkative, more emotional, and with a stronger need for security than males.

Male and female teachers rated least successful female students on opposite ends of the ranking scale in five categories. Male teachers saw least successful females as not aggressive, not adventurous, quiet, gentle, and uncomfortable with aggressive behavior. Female teachers described their least successful female students as being aggressive, adventurous, loud, rough, and comfortable about being aggressive.

TABLE 11
Paired *t*-test Results Comparing Male and Female Responses When Describing Least Successful Female Students

Descriptor	*t*(86)	*p*
Competitive	-3.7	.0007
Aggressive	-3.1	.0038
Emotional	-2.7	.0095
Adventurous	-2.7	.0102
Talkative	-2.7	.0107
Gentle or rough	-2.6	.0126
Need for security	2.3	.0282
Comfort with aggression	-2.2	.0315
Quiet or loud	2.0	.0497

Semantic Differential Analysis. Each set of adjectives on the Likert scale survey used in this study are either male or female valued with masculine and feminine poles (Broverman et al., 1970). Most successful male students were identified by both male and female teachers as having six masculine-poled traits and three feminine-poled traits. Five of the descriptions are male-valued items and four are female-valued. Table 12 shows the bipolar descriptions and their respective values as selected by all teachers for most successful male students.

TABLE 12
Gender-valued, Gender-biased Adjectives Used
by All Teachers to Describe Most Successful Male Students

Male-valued Terms

Feminine Pole	Masculine Pole
	Not easily influenced Very adventurous Very competitive Very self-confident Almost always acts as leader

Female-valued Terms

Very talkative Very neat in habits Very gentle	Very little need for security

Male teachers gave statistically significant responses in that they described most successful male students as being quiet and interested in their own appearance as shown in Table 13.

TABLE 13
Gender-valued, Gender-biased Adjectives Used
by Male Teachers to Describe Most Successful Male Students

Female-valued Terms

Feminine Pole	Masculine Pole
Interested in own appearance Quiet	

Female teachers gave statistically significant responses which differed from male teachers' responses. Female teachers described most successful males as aggressive, dominant, active, comfortable with aggressive behavior, aware of others' feelings, and not dependent as shown in Table 14.

TABLE 14
Gender-valued, Gender-biased Adjectives Used
by Female Teachers to Describe Most Successful Male Students

Male-valued Terms

Feminine Pole	Masculine Pole
	Aggressive Dominant Active Comfortable with aggression

Female-valued Terms

Aware of others' feelings	Not dependent

Most successful female students were described by both male and female teachers as having masculine-poled traits with ten descriptors and feminine-poled traits with six descriptors. Ten of the adjective pairs were male-valued traits; six were female-valued traits. Table 15 displays most successful female student descriptions.

TABLE 15
Gender-valued, Gender-biased Adjectives Used
by All Teachers to Describe Most Successful Female Students

Male-valued Terms

Feminine Pole	Masculine Pole
Very emotional	Very aggressive Very objective Not easily influenced Very dominant Very active Very adventurous Very competitive Very self-confident Almost always acts as leader Not at all dependent

Female-valued Terms

Very talkative Very interested in own appearance Very aware of feelings of others Very neat in habits Very gentle	Very little need for security

Male teachers gave statistically significant values for descriptors of most successful female students as being independent and quiet, as shown in Table 16.

TABLE 16
Gender-valued, Gender-biased Adjectives Used
by Male Teachers to Describe Most Successful Female Students

Male-valued Terms

Feminine Pole	Masculine Pole
	Independent

Female-valued Terms

Quiet	

Female teachers responses were statistically significant in the areas of comfort with aggression in addition to shared descriptions for most successful female students as shown in Table 17.

TABLE 17
Gender-valued, Gender-biased Adjectives Used
by Female Teachers to Describe Most Successful Female Students

Male-valued Terms

Feminine Pole	Masculine Pole
	Not comfortable with being aggressive

Least successful male students were described with feminine-poled traits of masculine-valued descriptors and masculine-poled traits of feminine-valued descriptors by both male and female teachers in nine of the ten areas of agreement in teacher surveys. Table 18 lists least successful male traits.

TABLE 18
Gender-valued, Gender-biased Adjectives Used
by All Teachers to Describe Least Successful Male Students

Male-valued Terms

Feminine Pole	Masculine Pole
Subjective Easily influenced Not competitive Not self-confident Almost never acts as leader Dependent	Not comfortable with being aggressive

Female-valued Terms

	Not interested in own appearance Not aware of others' feelings Sloppy in habits Rough

Male teachers reached agreement on an additional four descriptors including submissive, not adventurous, dependent, and need for security. These descriptors are shown in Table 19.

TABLE 19
Gender-valued, Gender-biased Adjectives Used
by Male Teachers to Describe Least Successful Male Students

Male-valued Terms

Feminine Pole	Masculine Pole
Not adventurous Dependent Not aggressive	

Female-valued Terms

Strong need for security	

Female teachers gave additional statistically significant responses in areas of submissive behavior and being loud as shown in Table 20.

TABLE 20
Gender-valued, Gender-biased Adjectives Used
by Female Teachers to Describe Least Successful Male Students

Male-valued Terms

Feminine Pole	Masculine Pole
Submissive	

Female-valued Terms

	Loud

Least successful female students were also described as exhibiting feminine-poled behaviors in male-valued terms and masculine-poled behaviors in female-valued terms. Table 21 shows least successful female descriptions where both male and female teachers reached statistically significant conclusions in the same area.

Table 21
Gender-valued, Gender-biased Adjectives Used
by All Teachers to Describe Least Successful Female Students

Male-valued Terms

Feminine Pole	Masculine Pole
Very easily influenced Very emotional Not very competitive Almost never acts as leader Very dependent	

Female-valued Terms

	Not aware of others' feelings

As shown in Table 22, male teachers described least successful females as being not aggressive, not adventurous, sloppy in habits, and not self-confident.

TABLE 22
Gender-valued, Gender-biased Adjectives Used
by Male Teachers to Describe Least Successful Female Students

Male-valued Terms

Feminine pole	Masculine pole
Not adventurous Not aggressive Not at all self-confident	

Female-valued Terms

	Sloppy in habits

Female teachers' responses also indicated statistically significant agreement in several areas as shown in Table 23. These areas included subjectivity, talkativeness, interest in own appearance, rough, not uncomfortable with being aggressive, and a strong need for security.

TABLE 23
Gender-valued, Gender-biased Adjectives Used
by Female Teachers to Describe Least Successful Female Students

Male-valued Terms

Feminine pole	Masculine pole
Subjective	Not at all uncomfortable about being aggressive

Female-valued terms

Talkative Very strong need for security	Not interested in own appearance Rough

Summary of Findings

This section presented differences and similarities in how male and female teachers described either most successful males, most successful females, least successful males, and least successful females. Differences between how male and female

teachers described their most and least successful students are summarized below:

1) Male and female teachers used statistically significant values on the Likert scale to describe male and female students.

2) Male and female teachers gave different statistically significant descriptors for male and female students.

3) Male and female teachers used opposite ends of the scale to describe least successful students in several categories (e.g., male teachers described least successful females as not aggressive but female teachers described least successful females as aggressive).

Sameness of descriptions given by male and female teachers regarding most and least successful students are as follows:

1) Both most successful male and female students fit the same general profile. They were described with masculine-poled male-valued and feminine-poled female-valued descriptors.

2) Least successful male and female students share feminine-poled masculine valued, and masculine-poled female valued traits.

3) Both most and least successful females are described by both male and female teachers as being much more emotional than male students.

Responses by Either Male or Female Teachers Describing Either Most or Least Successful Male or Female Students

Most Successful Males Compared to Most Successful Females by Male Teachers. Table 24 shows means, standard deviations, and *t*-test results for least successful female students as described by male teachers. Descriptions given by male teachers for most successful male and female students were also tested by ANOVA and two group paired *t*-tests. Table 25 shows statistically significant values. Most successful male students were described as being more self-confident, less emotional, and more adventurous than most successful female students.

TABLE 24

Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term

Male Teachers - Most Successful Students

		Most Successful Males			Most Successful Females		
		Mean	SD	*t*(39)	Mean	SD	*t*(39)
1.	Not aggressive/very aggressive	4.5	2.1	1.6	4.5	1.5	2.3*
2.	Not independent/very independent	4.7	2.2	1.9	4.7	1.5	3.1**
3.	Very objective/very subjective	3.6	1.9	-1.2	3.7	1.8	-1.1
4.	Very easily influenced/not easily influenced	4.7	2.0	2.3*	5.0	1.7	3.8**
5.	Very submissive/very dominant	4.5	1.7	1.9	4.5	1.3	2.4*
6.	Not at all talkative/very talkative	4.5	1.2	2.7**	4.7	1.2	3.7**
7.	Very active/very passive	3.4	1.9	-1.9	3.3	1.6	-2.8**
8.	Not at all emotional/very emotional	3.7	1.1	-1.5	4.5	1.4	2.4*
9.	Very interested in own appearance Not at all interested in own appearance	3.2	1.5	-3.6**	3.3	1.9	-2.3*
10.	Not at all adventurous/very adventurous	5.3	1.2	7.2**	4.8	0.9	5.9**
11.	Very aware of others' feelings Not at all aware of others' feelings	3.5	1.8	-1.7	3.1	1.8	-3.2**
12.	Not very competitive/very competitive	5.3	1.5	5.6**	5.6	1.3	7.6**
13.	Very sloppy in habits/very neat in habits	5.3	1.6	5.2**	5.7	1.2	9.2**
14.	Not at all self-confident/very self-confident	5.8	1.4	8.3**	4.8	1.6	3.1**
15.	Very loud/very quiet	4.8	1.1	4.9**	4.7	1.5	2.9**
16.	Almost never acts as leader Almost always acts as leader	4.9	1.5	4.1**	4.8	1.4	3.5**
17.	Very gentle/very rough	3.4	1.2	-3.2**	2.8	1.3	-5.4**
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	4.2	1.4	0.9	3.6	1.4	-1.7
19.	Not at all dependent/very dependent	3.5	1.9	-1.6	3.5	1.4	-2.1*
20.	Very strong need for security Very little need for security	4.6	1.4	2.7*	4.4	1.2	2.3*

TABLE 25
Paired *t*-test and ANOVA Results
Comparing Most Successful Male Students to
Most Successful Female Students by Male Teachers

Descriptor	*F*	*p*	*t*(78)	*p*
Self-confidence	9.7	.0025	5.3	.0001
Emotional	7.9	.0061	-3.7	.0006
Adventurous	4.2	.0427	2.9	.0061

F(1,39)

Data were also tested to determine whether any relationships existed between descriptors given for male and female students. Responses from male teachers describing most successful male and female students were compared. Strong correlations existed in the way male teachers described male and female students. Male teachers described successful students as being similar in areas of aggression, independence, ability to be influenced, emotions, awareness of other feelings, neatness of habits, comfortable with being aggressive, and need for dependence. Descriptions of gentle/rough were negatively correlated as shown in Table 26.

TABLE 26
Correlation and Regression Analysis
Comparing Most Successful Male Students to
Most Successful Female Students by Male Teachers

Descriptor	Correlation	R^2	Regression F	p
Acts as leader	.794	.631	66.7	.0001
Interested in appearance	.785	.616	62.6	.0001
Self-confident	.709	.503	39.5	.0001
Adventurous	.671	.450	31.9	.0001
Independent	.657	.432	28.1	.0001
Neat in habits	.504	.254	13.2	.0008
Dependent	.454	.206	10.1	.0029
Competitive	.400	.160	7.4	.0095
Aggressive	.386	.149	6.8	.0126
Easily influenced	.367	.135	6.1	.0183
Emotional	.355	.126	5.6	2260
Talkative	.350	.123	5.3	.0268
Gentle or rough	-.335	.112	4.9	.0325
Aware of others' feelings	.314	.099	4.3	.0453
Comfort with aggression	.253	.064		
Need for security	.182	.033		
Dominant	.163	.026		
Active	.121	.015		
Quiet or loud	-.072	.005		
Objective	-.052	.003		

Most Successful Males Compared to Most Successful Females by Female Teachers. Table 27 shows means, standard deviations, and *t*-test results for most successful male students as described by female teachers. Descriptions given by female teachers for most successful male and female students were also tested by ANOVA and two group paired *t*-tests. Table 28 shows statistically significant values. Male students were rated less emotional, less neat in habits, less dependent, with less need for security than most successful females.

Table 27
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
Female Teachers - Most Successful Students

		Most Successful Males			Most Successful Females		
		Mean	SD	*t*(47)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	4.7	2.1	2.3*	5.0	1.9	3.6**
2.	Not independent/very independent	4.7	2.3	1.9	4.5	2.1	1.7
3.	Very objective/very subjective	3.8	1.6	-0.7	4.0	1.6	-0.1
4.	Very easily influenced/not easily influenced	6.1	0.8	18.1**	5.8	1.2	10.2**
5.	Very submissive/very dominant	5.2	1.2	6.8**	5.5	1.0	10.3**
6.	Not at all talkative/very talkative	4.7	1.6	2.8**	4.6	1.6	2.8**
7.	Very active/very passive	3.0	1.4	-4.4**	2.8	1.4	-5.9**
8.	Not at all emotional/very emotional	4.0	1.4	-0.2	5.0	1.2	5.8**
9.	Very interested in own appearance Not at all interested in own appearance	3.6	1.7	-1.4	3.2	2.0	-2.5*
10.	Not at all adventurous/very adventurous	5.5	1.1	9.6**	5.4	1.0	9.4**
11.	Very aware of others' feelings Not at all aware of others' feelings	3.4	1.6	-2.3*	3.2	1.8	-3.1**
12.	Not very competitive/very competitive	6.1	0.8	16.6**	5.7	1.3	8.9**
13.	Very sloppy in habits/very neat in habits	5.8	1.4	8.3**	6.1	1.6	8.9**
14.	Not at all self-confident/very self-confident	6.3	0.6	27.4**	6.1	0.9	15.5**
15.	Very loud/very quiet	4.3	1.4	1.4	4.0	1.7	0.2
16.	Almost never acts as leader Almost always acts as leader	5.7	1.4	8.1**	5.5	1.5	7.2**
17.	Very gentle/very rough	3.1	1.2	-5.0**	3.2	1.5	-3.7**
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	5.2	1.5	5.2**	5.1	1.6	4.4**
19.	Not at all dependent/very dependent	2.4	1.3	-8.4**	3.1	1.7	-3.6**
20.	Very strong need for security Very little need for security	5.2	1.3	6.3**	4.5	1.5	2.2*

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

TABLE 28
Paired *t*-test and ANOVA Results
Comparing Most Successful Male Students to
Most Successful Female Students by Female Teachers

Descriptor	*F*	*p*	*t*(94)	*p*
Emotional	14.8	.0002	-5.0	.0001
Neat in habits			-3.0	.0050
Need for security	6.6	.0121	2.7	.0089
Dependent	4.8	.0318	-2.4	.0202

F(1, 47)

Data were also tested to determine whether any relationships existed between descriptors given for male and female students. Responses from female teachers describing most successful male and female students were compared. Female teacher responses were positively correlated between most successful male and female student descriptions for aggression, objectivity, ease of being influenced, talkativeness, quiet/loud, acts as leader, comfortable with being aggressive, dependence, and the need for security (see Table 29).

TABLE 29
Correlation and Regression Analysis
Comparing Most Successful Male Students to
Most Successful Female Students by Female Teachers

Descriptor	Correlation	R^2	Regression F	Regression p
Independent	.904	.817	161.1	.0001
Neat in habits	.599	.359	23.5	.0001
Objective	.467	.218	11.4	.0016
Easily influenced	.402	.161	8.1	.0069
Competitive	.401	.161	8.1	.0069
Talkative	.396	.157	7.8	.0078
Dependent	.393	.154	7.7	.0084
Quiet or loud	.372	.138	6.7	.0130
Acts as leader	.371	.138	6.7	.0130
Need for security	.348	.121	5.8	.0207
Comfort with aggression	.302	.091	4.1	.0479
Gentle or rough	.300	.090		
Dominant	.295	.087		
Adventurous	.224	.050		
Active	.176	.031		
Emotional	.171	.029		
Aggressive	.153	.023		
Aware of others' feelings	.098	.010		
Interested in appearance	.008			
Self-confident	.006			

Least Successful Males Compared to Least Successful Females by Male Teachers. Table 30 lists the results of analysis of male teachers' descriptions of least successful male and female students. Least successful male students were identified as being less emotional, less interested their own appearance, less aware of feelings of others, more competitive, sloppier, more self-confident, louder, rougher, and less uncomfortable about being aggressive than less successful females.

Table 31 shows ANOVA and paired *t*-test results of male teacher descriptions. Male teachers used significantly different values to describe least successful males and females for emotion, interest in appearance, awareness of others' feelings, competitiveness, neatness in habits, self-confidence, loud/quiet, gentle/rough, and comfort with being aggressive.

TABLE 30
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
Male Teachers - Least Successful Students

		Least Successful Males			Least Successful Females		
		Mean	SD	*t*(39)	Mean	SD	*t*(39)
1.	Not aggressive/very aggressive	3.1	2.4	-2.5*	2.9	2.1	-3.3**
2.	Not independent/very independent	3.8	2.5	-0.4	3.9	2.2	-0.4
3.	Very objective/very subjective	4.9	1.9	3.3**	4.4	1.8	1.5
4.	Very easily influenced/not easily influenced	2.7	1.8	-4.7**	2.7	1.8	-4.8**
5.	Very submissive/very dominant	3.8	1.9	-0.7	3.4	2.0	-1.9
6.	Not at all talkative/very talkative	4.5	2.0	1.6	4.1	2.6	0.2
7.	Very active/very passive	3.8	1.9	-0.7	4.2	2.1	0.7
8.	Not at all emotional/very emotional	3.9	2.1	-0.4	4.9	1.9	3.2**
9.	Very interested in own appearance Not at all interested in own appearance	5.0	1.6	4.0**	3.8	1.7	-0.8
10.	Not at all adventurous/very adventurous	3.4	1.6	-2.4*	3.2	1.6	-3.1**
11.	Very aware of others' feelings Not at all aware of others' feelings	5.8	1.4	8.3**	4.8	1.5	3.4**
12.	Not very competitive/very competitive	2.4	1.4	-7.4**	1.7	1.1	-14.0**
13.	Very sloppy in habits/very neat in habits	2.0	1.0	-13.1**	3.0	1.4	-4.6**
14.	Not at all self-confident/very self-confident	2.6	1.2	-7.6**	2.1	1.1	-10.7**
15.	Very loud/very quiet	3.5	1.9	-1.8	4.3	2.3	1.0
16.	Almost never acts as leader Almost always acts as leader	2.3	1.5	-7.2**	2.0	1.0	-12.2**
17.	Very gentle/very rough	5.0	1.5	4.4**	3.7	1.9	-1.1
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	4.6	1.9	2.3*	3.8	2.0	-0.7
19.	Not at all dependent/very dependent	4.9	1.4	4.4**	4.7	1.8	2.4*
20.	Very strong need for security Very little need for security	3.3	1.4	-3.3**	3.5	1.8	-1.5

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

TABLE 31
Paired *t*-test and ANOVA Results
Comparing Least Successful Male Students to
Least Successful Female Students by Male Teachers

Descriptor	*F*	*p*	*t*(78)	*p*
Neat in habits	12.3	.0007	-4.8	.0001
Gentle/rough	13.1	.0005	4.1	.0002
Interested in appearance	11.4	.0011	3.7	.0006
Aware of others' feelings	10.1	.0021	3.2	.0024
Competitive	6.8	.011	2.7	.0100
Comfort with aggression	4.1	.045	2.6	.0128
Loud/quit			-2.5	.0158
Self-confident			2.5	.0171
Emotional	5.8	.018	-2.1	.0451

F(1, 39)

Data were also tested to determine whether any relationships existed between descriptors given for male and female students. Responses from male teachers describing least successful male and female students were compared. Male teacher responses were positively correlated in areas of aggressive behavior, independence, objectivity, neat in habits, self-confidence, and comfort with aggression. (see Table 32).

TABLE 32
Correlation and Regression Analysis
Comparing Least Successful Male Students to
Least Successful Female Students by Male Teachers

Descriptor	Correlation	R^2	Regression F	p
Independent	0.584	0.341	18.1	.0001
Neat in habits	0.582	0.338	19.9	.0001
Objective	0.454	0.206	10.1	.0029
Dependent	0.441	0.195	9.4	.0039
Aggressive	0.396	0.157	7.3	.0103
Self-confident	0.315	0.099	4.3	.0448
Adventurous	0.294	0.087		
Interested in appearance	0.275	0.075		
Quiet or loud	0.256	0.066		
Gentle or rough	0.255	0.065		
Acts as leader	-0.236	0.056		
Talkative	0.141	0.02		
Emotional	-0.111	0.012		
Aware of others' feelings	0.106	0.011		
Active	-0.082	0.007		
Competitive	0.072	0.005		
Comfort with aggression	0.074	0.005		
Dominant	0.062	0.004		
Easily influenced	-0.036	0.001		
Need for security	-0.036	0.001		

Least Successful Males Compared to Least Successful Females by Female Teachers. Table 33 shows mean, standard deviations, and *t*-test results for least successful male and female students as described by female teachers. Least successful males were thought to be more dominant, less talkative, less emotional, less interested in their own appearance, sloppier, rougher, and with less need for security than females.

Descriptions given by female teachers for least successful male and female students were also tested by ANOVA and two group paired *t*-tests. Table 34 shows statistically significant values.

Table 33
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
Female teachers - Least Successful Students

		Least Successful Males			Least Successful Females		
		Mean	SD	*t*(47)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	3.7	2.3	-0.7	4.4	2.5	1.0
2.	Not independent/very independent	4.3	1.9	1.1	4.2	2.1	0.7
3.	Very objective/very subjective	5.4	1.5	6.2**	4.7	1.8	2.8**
4.	Very easily influenced/not easily influenced	2.8	1.9	-4.2**	2.7	2.3	-3.8**
5.	Very submissive/very dominant	4.9	1.7	3.7**	3.9	2.4	-0.4
6.	Not at all talkative/very talkative	4.3	2.2	1.0	5.3	2.1	4.2**
7.	Very active/very passive	4.1	2.2	0.2	3.7	2.4	-0.7
8.	Not at all emotional/very emotional	3.5	1.9	-1.6	5.8	1.1	11.5**
9.	Very interested in own appearance Not at all interested in own appearance	5.4	1.5	6.2**	3.3	2.0	-2.4*
10.	Not at all adventurous/very adventurous	3.9	1.9	-0.5	4.3	2.2	1.1
11.	Very aware of others' feelings Not at all aware of others' feelings	5.0	1.7	3.8**	4.8	1.8	3.1**
12.	Not very competitive/very competitive	2.3	1.4	-7.8**	2.6	1.6	-5.8**
13.	Very sloppy in habits/very neat in habits	2.4	1.5	-6.9**	3.5	1.9	-1.6
14.	Not at all self-confident/very self-confident	2.4	1.5	-7.0**	2.5	1.4	-7.3
15.	Very loud/very quiet	3.1	2.2	-2.6*	3.4	2.3	-1.9
16.	Almost never acts as leader Almost always acts as leader	2.2	1.2	-9.7**	2.3	1.6	-7.4**
17.	Very gentle/very rough	5.3	1.6	5.3**	4.6	1.9	2.2*
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	5.4	1.8	5.1**	4.7	2.1	2.2*
19.	Not at all dependent/very dependent	4.1	1.9	0.3	4.6	2.0	2.2*
20.	Very strong need for security Very little need for security	4.2	1.8	0.6	2.6	1.6	-5.8**

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

TABLE 34
Paired *t*-test and ANOVA Results
Comparing Least Successful Male Students
to Least Successful Female Students by Female Teachers

Descriptor	*F*	*p*	*t*(94)	*p*
Emotional	48.0	.0001	-7.0	.0001
Interested in appearance	32.2	.0001	5.2	.0001
Sloppy in habits	10.0	.0022	-4.3	.0001
Need for security	18.0	.0001	4.6	.0001
Submissive	6.1	.0153	2.6	.0124
Talkative	4.7	.032	-2.2	.0365
Rough			2.1	.0456

F(1, 47)

Data were also tested to determine whether any relationships existed between descriptors given for male and female students. Responses from female teachers describing least successful male and female students were compared. Female teacher responses for least successful male and female students were positively correlated for not being aware of others' feelings, not being competitive, not being neat in habits, lack of self-confidence, and need for dependence as shown in Table 35.

TABLE 35
Correlation and Regression Analysis
Comparing Least Successful Male Students to
Least Successful Female Students by Female Teachers

Descriptor	Correlation	R^2	Regression F	Regression p
Competitive	.657	.431	31.8	.0001
Aware of others' feelings	.524	.275	15.9	.0003
Self-confident	.511	.261	14.8	.0004
Neat in habits	.337	.114	5.4	.0251
Dependent	.319	.102	4.8	.0348
Independent	-.289	.084		
Easily influenced	.284	.081		
Aggressive	-.278	.077		
Dominant	.271	.074		
Gentle or rough	.251	.063		
Objectivity	.233	.054		
Need for security	.217	.047		
Quiet or loud	.198	.039		
Adventurous	.191	.037		
Comfort with aggression	.185	.034		
Acts as leader	.183	.033		
Talkative	.159	.025		
Emotional	.088	.008		
Interested in appearance	-.069	.005		
Active	.047	.002		

Summary of Findings. Table 36 compares ranked correlations by male and female teachers when describing most successful male and female students. The highest correlated values described by male teachers were in the areas of leadership, appearance, self-confidence, being adventurous and being independent. The highest correlated values described by female teachers were in areas of independence, neatness in habits, and objectivity. Negative correlations existed for male teachers in the area of gentle/rough between most successful male and female students.

TABLE 36
Correlation Coefficients of Male and Female
Teachers Describing Most Successful Male and Female Students

Male Teachers		Female Teachers	
.794	Acts as leader	.904	Independent
.785	Interested in appearance	.599	Neat in habits
.709	Self-confident	.467	Objective
.671	Adventurous	.402	Easily influenced
.657	Independent	.401	Competitive
.504	Neat in habits	.396	Talkative
.454	Dependent	.393	Dependent
.400	Competitive	.372	Quiet or loud
.386	Aggressive	.371	Acts as leader
.367	Easily influenced	.348	Need for security
.355	Emotional	.302	Comfort with aggression
.350	Talkative		
-.335	Gentle or rough	.300	Gentle or rough
.314	Aware of others' feelings	.295	Dominant
		.224	Adventurous
.253	Comfort with aggression	.176	Active
.182	Need for security	.171	Emotional
.163	Dominant	.153	Aggressive
.121	Active	.098	Aware of others' feelings
-.072	Quiet or loud	.008	Interested in appearance
-.052	Objective	.006	Self-confident

Table 37 compares ranked correlations by male and female teachers when describing least successful male and female students. The highest correlated descriptions given by male teachers' responses for least successful students were lack of independence and lack of neatness. Highest correlated descriptions given by female teachers were lack of competitiveness, not being aware of other's feelings, and no self-confidence.

TABLE 37
Correlation Coefficients of Male and Female
Teachers Describing Least Successful Male and Female Students

Male Teachers		Female Teachers	
.584	Not independent	.657	Not competitive
.582	Sloppy in habits	.524	Unaware of others' feelings
.454	Subjective	.511	Not self-confident
.441	Dependent	.337	Sloppy in habits
.396	Not aggressive	.319	Dependent
.315	Not self-confident		
		-.289	Independent
.294	Adventurous	.284	Aggressive
.275	Interested in appearance	-.278	Easily influenced
.256	Quiet or loud	.271	Dominant
.255	Gentle or rough	.251	Gentle or rough
.141	Talkative	.233	Objective
.106	Aware of others' feelings	.217	Need for security
.074	Comfort with aggression	.198	Quiet or loud
.072	Competitive	.191	Adventurous
.062	Dominant	.185	Comfort with aggression
-.036	Easily influenced	.183	Acts as leader
-.036	Need for security	.159	Talkative
-.082	Active	.088	Emotional
-.111	Emotional	-.069	Interested in appearance
-.236	Acts as leader	.047	Active

Responses by Either Male or Female Teachers Describing Most Successful Male or Female Students in Relation to Descriptions of Least Successful Students of the Same Sex.

Most Successful Males Compared to Least Successful Males by Male Teachers. Table 40 shows means, standard deviations, and *t*-test results for most and least successful male students as described by male teachers. Descriptions of most and least successful male students showed statistically significant differences. Least successful males were less aggressive, more subjective, more easily influenced, less interested in their own appearance, less adventurous, less aware of others' feelings, less competitive, sloppier, not as self-confident, louder, never acting as leaders, rough, more dependent, with a stronger need for security.

Two group paired *t*-tests were performed on data where same sex teachers described groups of same sex students. Male teachers described most successful males and least successful males differently in the areas shown in Table 39.

TABLE 38
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
Male Teachers - Male Students

		Most Successful Males			Least Successful Males		
		Mean	SD	*t*(39)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	4.5	2.1	1.6	3.1	2.4	-2.5*
2.	Not independent/very independent	4.7	2.2	1.9	3.8	2.5	-0.4
3.	Very objective/very subjective	3.6	1.9	-1.2	4.9	1.9	3.3**
4.	Very easily influenced/not easily influenced	4.7	2.0	2.3*	2.7	1.8	-4.7**
5.	Very submissive/very dominant	4.5	1.7	1.9	3.8	1.9	-0.7
6.	Not at all talkative/very talkative	4.5	1.2	2.7**	4.5	2.0	1.6
7.	Very active/very passive	3.4	1.9	-1.9	3.8	1.9	-0.7
8.	Not at all emotional/very emotional	3.7	1.1	-1.5	3.9	2.1	-0.4
9.	Very interested in own appearance Not at all interested in own appearance	3.2	1.5	-3.6**	5.0	1.6	4.0**
10.	Not at all adventurous/very adventurous	5.3	1.2	7.2**	3.4	1.6	-2.4*
11.	Very aware of others' feelings Not at all aware of others' feelings	3.5	1.8	-1.7	5.8	1.4	8.3**
12.	Not very competitive/very competitive	5.3	1.5	5.6**	2.4	1.4	-7.4**
13.	Very sloppy in habits/very neat in habits	5.3	1.6	5.2**	2.0	1.0	-13.1**
14.	Not at all self-confident/very self-confident	5.8	1.4	8.3**	2.6	1.2	-7.6**
15.	Very loud/very quiet	4.8	1.1	4.9**	3.5	1.9	-1.8
16.	Almost never acts as leader Almost always acts as leader	4.9	1.5	4.1**	2.3	1.5	-7.2**
17.	Very gentle/very rough	3.4	1.2	-3.2**	5.0	1.5	4.4**
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	4.2	1.4	0.9	4.6	1.9	2.3*
19.	Not at all dependent/very dependent	3.5	1.9	-1.6	4.9	1.4	4.4**
20.	Very strong need for security Very little need for security	4.6	1.4	2.7*	3.3	1.4	-3.3**

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

TABLE 39
Paired *t*-test Results Comparing Most Successful Male Students to Least Successful Male Students by Male Teachers

Descriptors	*t*(78)	*p*
Neat in habits	12.7	.0001
Self-confident	9.2	.0001
Competitive	8.0	.0001
Acts as leader	6.7	.0001
Interested in appearance	-6.2	.0001
Aware of others' feelings	-5.9	.0001
Adventurous	5.5	.0001
Gentle or rough	-4.7	.0001
Need for security	4.6	.0001
Easily influenced	4.2	.0001
Quiet or loud	3.7	.0007
Dependent	-3.3	.0019
Objective	-2.8	.0065
Aggressive	2.6	.0132

Data examined by correlation and regression analysis indicated strong inverse relationships between the way male teachers described most successful males and least successful males in the areas of independence, ability to be influenced, competition, leadership, gentle vs. rough, comfortable being aggressive, and need for dependence (see Table 40).

TABLE 40
Correlation and Regression Analysis
Comparing Most Successful Male Students to
Least Successful Male Students by Male Teachers

Descriptor	Correlation	R^2	Regression F	p
Self-confident	-.489	0.239	12.9	.0009
Acts as leader	-.434	0.189	9.5	.0036
Dependent	-.423	0.179	9.0	.0047
Independent	-.411	0.169	7.1	.0116
Gentle or rough	-.347	0.120	5.6	.0227
Comfort with aggression	-.343	0.118	5.5	.0243
Adventurous	-.340	0.116	5.3	.0268
Competitive	-.308	0.095	4.3	.0445
Easily influenced	-.307	0.094	4.3	.0451
Aggressive	-.278	0.077		
Neat in habits	.259	0.067		
Quiet or loud	-.255	0.065		
Interested in appearance	.246	0.060		
Objective	-.240	0.058		
Emotional	-.238	0.057		
Talkative	-.202	0.041		
Aware of others' feelings	-.165	0.027		
Need for security	.147	0.022		
Dominant	-.119	0.014		
Active	-.111	0.012		

Most Successful Males Compared to Least Successful Males by Female Teachers. Table 41 shows means, standard deviations, and *t*-test results for most and least successful male students as described by female teachers. Least successful males were less aggressive, more subjective, more easily influenced, more passive, less interested in their own appearance, less adventurous, less aware of others' feelings, less competitive, sloppier, less self-confident, louder, never acting as leaders, rougher, more dependent, with a greater need for security than most successful males.

Two group paired *t*-tests were performed on data where female teachers described groups of same sex students. Female teachers described most successful males and least successful males differently in areas shown in Table 42.

TABLE 41
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
Female Teachers - Male Students

		Most Successful Males			Least Successful Males		
		Mean	SD	*t*(39)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	4.7	2.1	2.3*	3.7	2.3	-0.7
2.	Not independent/very independent	4.7	2.3	1.9	4.3	1.9	1.1
3.	Very objective/very subjective	3.8	1.6	-0.7	5.4	1.5	6.2**
4.	Very easily influenced/not easily influenced	6.1	0.8	18.1**	2.8	1.9	-4.2**
5.	Very submissive/very dominant	5.2	1.2	6.8**	4.9	1.7	3.7**
6.	Not at all talkative/very talkative	4.7	1.6	2.8**	4.3	2.2	1.0
7.	Very active/very passive	3.0	1.4	-4.4**	4.1	2.2	0.2
8.	Not at all emotional/very emotional	4.0	1.4	-0.2	3.5	1.9	-1.6
9.	Very interested in own appearance Not at all interested in own appearance	3.6	1.7	-1.4	5.4	1.5	6.2**
10.	Not at all adventurous/very adventurous	5.5	1.1	9.6**	3.9	1.9	-0.5
11.	Very aware of others' feelings Not at all aware of others' feelings	3.4	1.6	-2.3*	5.0	1.7	3.8**
12.	Not very competitive/very competitive	6.1	0.8	16.6**	2.3	1.4	-7.8**
13.	Very sloppy in habits/very neat in habits	5.8	1.4	8.3**	2.4	1.5	-6.9**
14.	Not at all self-confident/very self-confident	6.3	0.6	27.4**	2.4	1.5	-7.0**
15.	Very loud/very quiet	4.3	1.4	1.4	3.1	2.2	-2.6*
16.	Almost never acts as leader Almost always acts as leader	5.7	1.4	8.1**	2.2	1.2	-9.7**
17.	Very gentle/very rough	3.1	1.2	-5.0**	5.3	1.6	5.3**
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	5.2	1.5	5.2**	5.4	1.8	5.1**
19.	Not at all dependent/very dependent	2.4	1.3	-8.4**	4.1	1.9	0.3
20.	Very strong need for security Very little need for security	5.2	1.3	6.3**	4.2	1.8	0.6

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

TABLE 42
Paired *t*-test Results Comparing Most Successful Male Students to Least Successful Male Students by Female Teachers

Descriptor	*t*(94)	*p*
Self-confident	16.7	.0001
Competitive	15.0	.0001
Acts as leader	12.3	.0001
Neat in habits	11.o	.0001
Easily influenced	10.2	.0001
Gentle or rough	-7.0	.0001
Adventurous	6.0	.0001
Objective	-5.7	.0001
Interested in appearance	-4.8	.0001
Dependent	-4.5	.0001
Aware of others' feelings	-3.8	.0004
Quiet or loud	3.6	.0009
Need for security	3.5	.0011
Active	-3.1	.0029
Aggressive	2.2	.0319

Data were next examined by correlation and regression analysis. Female teachers' responses were negatively correlated between most successful males and least successful males in dominance, and being aware of others' feelings. Least successful males were less dominant and less aware of others' feelings than most successful males. Positive correlations were found for objectivity, activeness, adventurousness, and quietness/loudness (see Table 43).

TABLE 43
Correlation and Regression Analysis
Comparing Most Successful Male Students to
Least Successful Male Students by Female Teachers

Descriptor	Correlation	R^2	Regression F	Regression p
Dominant	-0.403	0.163	8.1	.0067
Active	0.341	0.117	5.5	.0234
Quiet or loud	0.338	0.114	5.3	.0267
Objective	0.336	0.113	5.2	.0278
Aware of others' feelings	-0.327	0.107	5.1	.0309
Adventurous	0.313	0.098	4.6	.0385
Emotional	0.269	0.072		
Need for security	0.191	0.037		
Interested in appearance	-0.165	0.027		
Dependent	-0.145	0.021		
Independent	0.139	0.019		
Self-confident	0.124	0.015		
Talkative	0.106	0.011		
Comfort with aggression	-0.095	0.009		
Easily influenced	-0.084	0.007		
Aggressive	-0.066	0.004		
Gentle or rough	-0.062	0.004		
Neat in habits	0.052	0.003		
Competitive	-0.034	0.001		
Acts as leader	-0.022			

Most Successful Females Compared to Least Successful Females by Male Teachers. Table 44 shows means, standard deviations, and *t*-test results for most and least successful female students as described by male teachers. Least successful females were less aggressive, more easily influenced, more submissive, more passive, less adventurous, less aware of others' feelings, less competitive, sloppier in habits, less self-confident, seldom acting as leaders, rougher, and more dependent than most successful females.

Two group paired *t*-tests were performed on data of same sex students. Male teachers described most successful females and least successful females differently in the areas shown in Table 45.

TABLE 44
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
Male Teachers - Female Students

		Most Successful Females			Least Successful Females		
		Mean	SD	*t*(39)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	4.5	1.5	2.3*	2.9	2.1	-3.3**
2.	Not independent/very independent	4.7	1.5	3.1**	3.9	2.2	-0.4
3.	Very objective/very subjective	3.7	1.8	-1.1	4.4	1.8	1.5
4.	Very easily influenced/not easily influenced	5.0	1.7	3.8**	2.7	1.8	-4.8**
5.	Very submissive/very dominant	4.5	1.3	2.4*	3.4	2.0	-1.9
6.	Not at all talkative/very talkative	4.7	1.2	3.7**	4.1	2.6	0.2
7.	Very active/very passive	3.3	1.6	-2.8**	4.2	2.1	0.7
8.	Not at all emotional/very emotional	4.5	1.4	2.4*	4.9	1.9	3.2**
9.	Very interested in own appearance Not at all interested in own appearance	3.3	1.9	-2.3*	3.8	1.7	-0.8
10.	Not at all adventurous/very adventurous	4.8	0.9	5.9**	3.2	1.6	-3.1**
11.	Very aware of others' feelings Not at all aware of others' feelings	3.1	1.8	-3.2**	4.8	1.5	3.4**
12.	Not very competitive/very competitive	5.6	1.3	7.6**	1.7	1.1	-14.0**
13.	Very sloppy in habits/very neat in habits	5.7	1.2	9.2**	3.0	1.4	-4.6**
14.	Not at all self-confident/very self-confident	4.8	1.6	3.1**	2.1	1.1	-10.7**
15.	Very loud/very quiet	4.7	1.5	2.9**	4.3	2.3	1.0
16.	Almost never acts as leader Almost always acts as leader	4.8	1.4	3.5**	2.0	1.0	-12.2**
17.	Very gentle/very rough	2.8	1.3	-5.4**	3.7	1.9	-1.1
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	3.6	1.4	-1.7	3.8	2.0	-0.7
19.	Not at all dependent/very dependent	3.5	1.4	-2.1*	4.7	1.8	2.4*
20.	Very strong need for security Very little need for security	4.4	1.2	2.3*	3.5	1.8	-1.5

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

TABLE 45
Paired *t*-test Results Comparing Most Successful Female Students to Least Successful Female Students by Male Teachers

Descriptor	*t*(78)	*p*
Competitive	13.3	.0001
Acts as leader	12.1	.0001
Neat in habits	10.8	.0001
Self-confident	9.3	.0001
Aware of others' feelings	-5.8	.0001
Easily influenced	5.7	.0001
Adventurous	4.9	.0001
Aggressive	3.5	.0010
Dominant	2.8	.0071
Dependent	-2.6	.0128
Active	-2.3	.0262
Gentle/rough	-2.2	.0304

Data were next examined by correlation and regression analysis. Male teachers' descriptions of most successful females and least successful females were negatively related in areas of independence, objectivity, adventurousness, dependence, and need for security. Descriptors including emotions, awareness of others' feelings, and leadership were positively related (see Table 46).

TABLE 46
Correlation and Regression Analysis
Comparing Most Successful Female Students to
Least Successful Female Students by Male Teachers

Descriptor	Correlation	R^2	Regression F	p
Objective	-.598	0.358	21.7	.0001
Dependent	-.488	0.238	12.2	.0012
Independent	-.462	0.214	9.5	.0126
Need for security	-.435	0.189	7.7	.0090
Aware of others' feelings	.370	0.137	6.2	.0171
Emotional	.341	0.116	5.1	.0292
Adventurous	-.325	0.106	4.6	.0381
Acts as leader	.318	0.101	4.4	.0426
Aggressive	-.271	0.073		
Neat in habits	.250	0.063		
Competitive	-.218	0.048		
Quiet or loud	-.162	0.026		
Easily influenced	-.138	0.019		
Self-confident	.122	0.015		
Talkative	-.107	0.005		
Comfort with aggression	.055	0.003		
Dominant	-.041	0.002		
Active	-.049	0.002		
Interested in appearance	-.033	0.001		
Gentle or rough	-.028	0.001		

Most Successful Females Compared to Least Successful Females by Female Teachers. Table 47 shows means, standard deviations, and *t*-test results for most and least successful female students as described by female teachers. Female teachers found least successful female students to be more easily influenced, more submissive, more passive, more emotional, less adventurous, less aware of feelings of others, less competitive, sloppier, less self-confident, never acting as leaders, rougher, and more dependent with a greater need for security than most successful females.

Two group paired *t*-tests were performed on data where same sex teacher described groups of same sex students. Female teachers described most successful females and least successful females differently in areas shown in Table 48.

TABLE 47
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
Female Teachers - Female Students

		Most Successful Females			Least Successful Females		
		Mean	SD	*t*(39)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	5.0	1.9	3.6**	4.4	2.5	1.0
2.	Not independent/very independent	4.5	2.1	1.7	4.2	2.1	0.7
3.	Very objective/very subjective	4.0	1.6	-0.1	4.7	1.8	2.8**
4.	Very easily influenced/not easily influenced	5.8	1.2	10.2**	2.7	2.3	-3.8**
5.	Very submissive/very dominant	5.5	1.0	10.3**	0.9	2.4	-0.4
6.	Not at all talkative/very talkative	4.6	1.6	2.8**	5.3	2.1	4.2**
7.	Very active/very passive	2.8	1.4	-5.9**	3.7	2.4	-0.7
8.	Not at all emotional/very emotional	5.0	1.2	5.8**	5.8	1.1	11.5**
9.	Very interested in own appearance Not at all interested in own appearance	3.2	2.0	-2.5*	3.3	2.0	-2.4*
10.	Not at all adventurous/very adventurous	5.4	1.0	9.4**	4.3	2.2	1.1
11.	Very aware of others' feelings Not at all aware of others' feelings	3.2	1.8	-3.1**	4.8	1.8	3.1**
12.	Not very competitive/very competitive	5.7	1.3	8.9**	2.6	1.6	-5.8**
13.	Very sloppy in habits/very neat in habits	6.1	1.6	8.9**	3.5	1.9	-1.6
14.	Not at all self-confident/very self-confident	6.1	0.9	15.5**	2.5	1.4	-7.3
15.	Very loud/very quiet	4.0	1.7	0.2	3.4	2.3	-1.9
16.	Almost never acts as leader Almost always acts as leader	5.5	1.5	7.2**	2.3	1.6	-7.4**
17.	Very gentle/very rough	3.2	1.5	-3.7**	4.6	1.9	2.2*
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	5.1	1.6	4.4**	4.7	2.1	2.2*
19.	Not at all dependent/very dependent	3.1	1.7	-3.6**	4.6	2.0	2.2*
20.	Very strong need for security Very little need for security	4.5	1.5	2.2*	2.6	1.6	-5.8**

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

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TABLE 48
Paired *t*-test Results Comparing
Most Successful Female Students to Least
Successful Female Students by Female Teachers

Descriptor	*t*(94)	*p*
Self-confident	14.2	.0001
Competitive	9.2	.0001
Acts as leader	8.4	.0001
Easily influenced	7.3	.0001
Neat in habits	7.3	.0001
Need for security	5.8	.0001
Aware of others' feelings	-5.0	.0001
Dominant	3.9	.0003
Dependent	-3.7	.0005
Gentle or rough	-3.6	.0007
Emotional	-3.3	.0019
Adventurous	2.9	.0057
Active	-2.1	.0420

Data were next examined by correlation and regression analysis. Female teachers described most successful females' behaviors as being negatively correlated to least successful females in areas of aggression, objectivity, dominance, talkativeness, quiet/loud, leadership, and comfortable being aggressive (see Table 49).

TABLE 49
Correlation and Regression Analysis
Comparing Most Successful Female Students
to Least Successful Female Students by Female Teachers

Descriptor	Correlation	R^2	Regression F	p
Talkative	-.567	0.321	20.8	.0001
Acts as leader	-.485	0.235	13.5	.0006
Objective	-.446	0.199	10.9	.0019
Aggressive	-.444	0.197	10.8	.0020
Quiet or loud	-.418	0.175	9.3	.0038
Comfort with aggression	-.394	0.155	8.1	.0068
Dominant	-.352	0.124	6.2	.0166
Gentle or rough	-.282	0.079		
Easily influenced	-.256	0.065		
Aware of others' feelings	.242	0.059		
Competitive	-.225	0.051		
Active	-.224	0.050		
Dependent	-.167	0.028		
Interested in appearance	-.141	0.020		
Independence	-.102	0.010		
Neat in habits	.099	0.010		
Emotional	-.089	0.008		
Self-confident	-.173	0.005		
Adventurous	-.064	0.004		
Need for security	.024	0.001		

Summary of Findings. Table 50 compares ranked correlations by male and female teachers when describing most and least successful male students. The highest correlated values given by male teachers were in the areas of self-confidence, leadership, and dependence. The highest correlated values given by female teachers were in areas of dominance, activeness, and objectivity. All statistically significant values for male teacher descriptions were negatively related. Two values given by female teachers were negatively related and three were positively correlated.

TABLE 50
Correlation Coefficients of Male and Female
Teachers Describing Most and Least Successful Male Students

Male Teachers		Female Teachers	
-.489	Self-confident	-.403	Dominant
-.434	Acts as leader	.341	Active
-.423	Dependent	.336	Objective
-.411	Independent	-.327	Aware of others' feelings
-.347	Gentle or rough	.313	Adventurous
-.343	Comfort with aggression		
-.340	Adventurous	.269	Emotional
-.308	Competitive	.191	Need for security
-.307	Easily influenced	-.165	Interested in appearance
		-.145	Dependent
-.278	Aggressive	.139	Independent
.259	Neat in habits	.124	Self-confident
-.255	Quiet or loud	.106	Talkative
.246	Interested in appearance	-.095	Comfort with aggression
-.240	Objectivity	-.084	Easily influenced
-.238	Emotional	-.066	Aggressive
-.202	Talkative	-.062	Gentle or rough
-.165	Aware of others' feelings	.052	Neat in habits
.147	Need for security	-.034	Competitive
-.119	Dominant	.338	Quiet or loud
-.111	Active	-.022	Acts as leader

Table 51 compares ranked correlations by male and female teachers when describing most and least successful female students. The highest correlated descriptions given by male teachers were in the areas of objectivity, dependence, and need for security. The highest correlated descriptions given by female teachers were in areas of talkativeness, leadership, objectivity, and aggressiveness. All statistically significant values for female teacher descriptions were negatively related. Five descriptions given by male teachers were negatively related and three were positively correlated.

TABLE 51
Correlation Coefficients of Male and Female
Teachers Describing Most and Least Successful Female Students

Male Teachers		Female Teachers	
-.598	Objective	-.567	Talkative
-.488	Dependent	-.485	Acts as leader
-.462	Independence	-.446	Objectivity
-.435	Need for security	-.444	Aggressive
.370	Aware of others' feelings	-.418	Quiet or loud
.341	Emotional	-.394	Comfort with aggression
-.325	Adventurous	-.352	Dominant
.318	Acts as leader		
		-.282	Gentle or rough
-.271	Aggressive	-.256	Easily influenced
.250	Neat in habits	.242	Aware of others' feelings
-.218	Competitive	-.225	Competitive
-.162	Quiet or loud	-.224	Active
-.138	Easily influenced	-.167	Dependent
.122	Self-confident	-.141	Interested in appearance
-.107	Talkative	-.102	Independent
.055	Comfort with aggression	.099	Neat in habits
-.041	Dominant	-.089	Emotional
-.049	Active	-.173	Self-confident
-.033	Interested in appearance	-.064	Adventurous
-.028	Gentle or rough	.024	Need for security

Table 52 shows ANOVA values for descriptions given for most and least successful males by male and female teachers. The top four values of *F* for both groups of teachers are of the same descriptors.

TABLE 52
ANOVA Values of Male and Female Teachers
Describing Most and Least Successful Male Students

Male Teachers	*F*	Female Teachers	*F*
Neat in habits	12.7	Self-confident	16.7
Self-confident	9.2	Competitive	15.0
Competitive	8.0	Acts as leader	12.3
Acts as leader	6.7	Neat in habits	11.o
Interested in appearance	-6.2	Easily influenced	10.2
Aware of others' feelings	-5.9	Gentle or rough	-7.0
Adventurous	5.5	Adventurous	6.0
Gentle or rough	-4.7	Objective	-5.7
Need for security	4.6	Interested in appearance	-4.8
Easily influenced	4.2	Dependent	-4.5
Quiet or loud	3.7	Aware of others' feelings	-3.8
Dependent	-3.3	Quiet or loud	3.6
Objective	-2.8	Need for security	3.5
Aggressive	2.6	Active	-3.1
		Aggressive	2.2
F(1, 39)		*F*(1, 47)	

Table 53 shows ANOVA values for descriptions given for most and least successful female students by male and female teachers. Three of the top four values of *F* for both groups of teachers are of the same descriptions.

TABLE 53
ANOVA Values of Male and Female Teachers
Describing Most and Least Successful Female Students

Male Teachers	*F*	Female Teachers	*F*
Competitive	13.3	Self-confident	14.2
Acts as leader	12.1	Competitive	9.2
Neat in habits	10.8	Acts as leader	8.4
Self-confident	9.3	Easily influenced	7.3
Aware of others' feelings	-5.8	Neat in habits	7.3
Easily influenced	5.7	Need for security	5.8
Adventurous	4.9	Aware of others' feelings	-5.0
Aggressive	3.5	Dominant	3.9
Dominant	2.8	Dependent	-3.7
Dependent	-2.6	Gentle/rough	-3.6
Active	-2.3	Emotional	-3.3
Gentle/rough	-2.2	Adventurous	2.9
		Active	-2.1
F(1, 39)		*F*(1, 47)	

Responses by Either Male of Female Teachers Describing Most Successful Male or Female Students in Relation to Descriptions of Least Successful Students of the Opposite Sex.

Most Successful Males Compared to Least Successful Females by Male Teachers. Finally, in addressing question two of the study, tables are shown which display differences between most successful and least successful students cross-gender. Table 54 shows means, standard deviations, and *t*-test results for most successful male and least successful female students as described by male teachers. Least successful females were described as being less aggressive, more easily influenced, more submissive, more emotional, less adventurous, less aware of others' feelings, less competitive, less neat in habits, less self-confident, never acting as leaders, and more dependent with a greater need for security than most successful males.

Descriptions given by male teachers for most successful male and least successful female students were also tested by ANOVA and two group paired t-tests. Table 55 shows statistically significant values.

TABLE 54

Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term

Male Teachers - Most Successful Males to Least Successful Females

		Most Successful Males			Least Successful Females		
		Mean	SD	*t*(39)	Mean	SD	*t*(39)
1.	Not aggressive/very aggressive	4.5	2.1	1.6	2.9	2.1	-3.3**
2.	Not independent/very independent	4.7	2.2	1.9	3.9	2.2	-0.4
3.	Very objective/very subjective	3.6	1.9	-1.2	4.4	1.8	1.5
4.	Very easily influenced/not easily influenced	4.7	2.0	2.3*	2.7	1.8	-4.8**
5.	Very submissive/very dominant	4.5	1.7	1.9	3.4	2.0	-1.9
6.	Not at all talkative/very talkative	4.5	1.2	2.7**	4.1	2.6	0.2
7.	Very active/very passive	3.4	1.9	-1.9	4.2	2.1	0.7
8.	Not at all emotional/very emotional	3.7	1.1	-1.5	4.9	1.9	3.2**
9.	Very interested in own appearance	3.2	1.5	-3.6**	3.8	1.7	-0.8
	Not at all interested in own appearance						
10.	Not at all adventurous/very adventurous	5.3	1.2	7.2**	3.2	1.6	-3.1**
11.	Very aware of others' feelings	3.5	1.8	-1.7	4.8	1.5	3.4**
	Not at all aware of others' feelings						
12.	Not very competitive/very competitive	5.3	1.5	5.6**	1.7	1.1	-14.0**
13.	Very sloppy in habits/very neat in habits	5.3	1.6	5.2**	3.0	1.4	-4.6**
14.	Not at all self-confident/very self-confident	5.8	1.4	8.3**	2.1	1.1	-10.7**
15.	Very loud/very quiet	4.8	1.1	4.9**	4.3	2.3	1.0
16.	Almost never acts as leader	4.9	1.5	4.1**	2.0	1.0	-12.2**
	Almost always acts as leader						
17.	Very gentle/very rough	3.4	1.2	-3.2**	3.7	1.9	-1.1
18.	Very uncomfortable about being aggressive	4.2	1.4	0.9	3.8	2.0	-0.7
	Not at all uncomfortable about being aggressive						
19.	Not at all dependent/very dependent	3.5	1.9	-1.6	4.7	1.8	2.4*
20.	Very strong need for security	4.6	1.4	2.7*	3.5	1.8	-1.5
	Very little need for security						

Scores above 4 indicate more agreement with the term on the right.

*p<.05 **p<.01

TABLE 55
Paired *t*-test and ANOVA Results
Comparing Most Successful Male Students to
Least Successful Female Students by Male Teachers

Descriptor	*F*	*p*	*t*(78)	*p*
Self-confident	172.1	.0001	15.2	.0001
Competitive	156.6	.0001	11.0	.0001
Acts as leader	108.0	.0001	13.0	.0001
Neat in habits	48.0	.0001	7.7	.0001
Adventurous	46.0	.0001	6.1	.0001
Easily influenced	23.6	.0001	5.6	.0001
Emotional	12.7	.0006	-3.9	.0003
Aware of others' feelings	11.8	.0009	-2.9	.0059
Aggressive	11.7	:0010	3.2	.0027
Dependent	7.9	.0060	-2.1	.0380
Need for security	7.7	.0068	2.9	.0057
Dominant	7.0	.0097	2.2	.0300

F(1, 39)

Data were next examined by correlation and regression analysis. Male teachers' responses were related in several areas between most successful males and least successful females. Responses were positively correlated in areas of need for security, acts as leader, comfort with aggression, and easily influenced. They were negatively correlated in areas of need for dependence and objectivity (see table 56).

TABLE 56
Correlation and Regression Analysis
Comparing Most Successful Male Students to
Least Successful Female Students by Male Teachers

Descriptor	Correlation	R^2	Regression F	Regression p
Need for security	.466	.217	9.2	.0048
Acts as leader	.412	.169	8.0	.0075
Dependent	-.386	.149	6.8	.0128
Comfort with aggression	.376	.141	6.4	.0154
Objective	-.371	.138	5.9	.0199
Easily influenced	.327	.107	4.7	.0371
Self-confident	.304	.093		
Talkative	-.302	.091		
Neat in habits	255	.065		
Competitive	-.250	.062		
Active	-.197	.039		
Interested in appearance	-.19	.036		
Dominant	-.167	.028		
Aware of others' feelings	-.155	.024		
Emotional	.145	.021		
Adventurous	-.113	.013		
Independent	-.101	.010		
Gentle or rough	.091	.008		
Aggressive	-.006			
Quiet or loud				

Most Successful Males Compared to Least Successful Females by Female Teachers. Table 57 shows means, standard deviations, and *t*-test results for most successful male and least successful female students as described by female teachers. Least successful females were thought to be more subjective, more easily influenced by others, less dominant, less emotional, less adventurous, less aware of other's feelings, less competitive, less neat in habits, less self-confident, louder, never acting as leaders, rougher, rougher, more dependent, with a stronger need for security than most successful males.

Descriptions given by female teachers for most successful male and least successful female students were also tested by ANOVA and two group paired *t*-tests. Table 58 shows statistically significant values.

TABLE 57
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
Female Teachers - Most to Least Successful Students

		Most Successful Males			Least Successful Females		
		Mean	SD	*t*(39)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	4.7	2.1	2.3*	4.4	2.5	1.0
2.	Not independent/very independent	4.7	2.3	1.9	4.2	2.1	0.7
3.	Very objective/very subjective	3.8	1.6	-0.7	4.7	1.8	2.8**
4.	Very easily influenced/not easily influenced	6.1	0.8	18.1**	2.7	2.3	-3.8**
5.	Very submissive/very dominant	5.2	1.2	6.8**	0.9	2.4	-0.4
6.	Not at all talkative/very talkative	4.7	1.6	2.8**	5.3	2.1	4.2**
7.	Very active/very passive	3.0	1.4	-4.4**	3.7	2.4	-0.7
8.	Not at all emotional/very emotional	4.0	1.4	-0.2	5.8	1.1	11.5**
9.	Very interested in own appearance Not at all interested in own appearance	3.6	1.7	-1.4	3.3	2.0	-2.4*
10.	Not at all adventurous/very adventurous	5.5	1.1	9.6**	4.3	2.2	1.1
11.	Very aware of others' feelings Not at all aware of others' feelings	3.4	1.6	-2.3*	4.8	1.8	3.1**
12.	Not very competitive/very competitive	6.1	0.8	16.6**	2.6	1.6	-5.8**
13.	Very sloppy in habits/very neat in habits	5.8	1.4	8.3**	3.5	1.9	-1.6
14.	Not at all self-confident/very self-confident	6.3	0.6	27.4**	2.5	1.4	-7.3
15.	Very loud/very quiet	4.3	1.4	1.4	3.4	2.3	-1.9
16.	Almost never acts as leader Almost always acts as leader	5.7	1.4	8.1**	2.3	1.6	-7.4**
17.	Very gentle/very rough	3.1	1.2	-5.0**	4.6	1.9	2.2*
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	5.2	1.5	5.2**	4.7	2.1	2.2*
19.	Not at all dependent/very dependent	2.4	1.3	-8.4**	4.6	2.0	2.2*
20.	Very strong need for security Very little need for security	5.2	1.3	6.3**	2.6	1.6	-5.8**

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

TABLE 58
Paired *t*-test and ANOVA Results
Comparing Most Successful Male Students to
Least Successful Female Students by Female Teachers

Descriptor	*F*	*p*	*t*(94)	*p*
Self-confident	283.2	.0001	16.5	.0001
Competitive	167.3	.0001	14.4	.0001
Acts as leader	117.4	.0001	11.0	.0001
Easily influenced	84.1	.0001	10.0	.0001
Need for security	70.4	.0001	8.9	.0001
Emotional	50.1	.0001	-6.3	.0001
Dependent	41.2	.0001	-6.7	.0001
Neat in habits	39.5	.0001	5.4	.0001
Gentle or rough	20.9	.0001	-3.6	.0009
Aware of others' feelings	14.9	.0002	-3.4	.0013
Dominant	11.5	.0010	2.6	.0116
Adventurous	10.9	.0014	3.7	.0006
Objective	6.3	.0138	-3.3	.0018
Quiet or loud	5.3	.0232		

F(1, 47)

Data were next examined by correlation and regression analysis. In comparing most successful males to least successful females, female teachers' responses were negatively correlated in dominance, talkativeness, quietness/loudness, gentleness/roughness, and comfortable with being aggressive (see Table 59).

TABLE 59
Correlation and Regression Analysis
Comparing Most Successful Male Students to
Least Successful Female Students by Female Teachers

Descriptor	Correlation	R^2	Regression F	Regression p
Gentle or rough	-.604	.365	24.1	.0001
Dominant	-.530	.281	16.4	.0002
Comfort with aggression	-.459	.210	10.6	.0023
Quiet or loud	-.398	.158	7.9	.0075
Talkative	-.328	.107	5.0	.0300
Aggressive	-.298	.089		
Neat in habits	-.233	.054		
Emotional	-.205	.042		
Aware of others' feelings	-.186	.035		
Need for security	.168	.028		
Objective	.149	.022		
Independent	.130	.017		
Easily influenced	-.093	.009		
Active	-.090	.008		
Acts as leader	-.072	.005		
Dependent	-.039	.002		
Adventurous	.026	.001		
Interested in appearance	-.012			
Competitive				
Self-confident				

Most Successful Females Compared to Least Successful Males by Male Teachers. Table 60 shows means, standard deviations, and *t*-test results for most successful female and least successful male students as described by male teachers. Least successful males were less aggressive, more subjective, more easily influenced by others, less interested in their own appearance, less adventurous, less aware of other people's feelings, less competitive, sloppier, less self-confident, louder, never acting as leaders, rougher, more uncomfortable about being aggressive, and more dependent with more of a need for security than most successful females.

Descriptions given by male teachers for most successful female and least successful male students were also tested by ANOVA and two group paired *t*-tests. Table 61 shows statistically significant values.

TABLE 60

Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term

Male teachers - Most Successful Females to Least Successful Males

		Most Successful Females			Least Successful Males		
		Mean	SD	*t*(39)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	4.5	1.5	2.3*	3.1	2.4	-2.5*
2.	Not independent/very independent	4.7	1.5	3.1**	3.8	2.5	-0.4
3.	Very objective/very subjective	3.7	1.8	-1.1	4.9	1.9	3.3**
4.	Very easily influenced/not easily influenced	5.0	1.7	3.8**	2.7	1.8	-4.7**
5.	Very submissive/very dominant	4.5	1.3	2.4*	3.8	1.9	-0.7
6.	Not at all talkative/very talkative	4.7	1.2	3.7**	4.5	2.0	1.6
7.	Very active/very passive	3.3	1.6	-2.8**	3.8	1.9	-0.7
8.	Not at all emotional/very emotional	4.5	1.4	2.4*	3.9	2.1	-0.4
9.	Very interested in own appearance Not at all interested in own appearance	3.3	1.9	-2.3*	5.0	1.6	4.0**
10.	Not at all adventurous/very adventurous	4.8	0.9	5.9**	3.4	1.6	-2.4*
11.	Very aware of others' feelings Not at all aware of others' feelings	3.1	1.8	-3.2**	5.8	1.4	8.3**
12.	Not very competitive/very competitive	5.6	1.3	7.6**	2.4	1.4	-7.4**
13.	Very sloppy in habits/very neat in habits	5.7	1.2	9.2**	2.0	1.0	-13.1**
14.	Not at all self-confident/very self-confident	4.8	1.6	3.1**	2.6	1.2	-7.6**
15.	Very loud/very quiet	4.7	1.5	2.9**	3.5	1.9	-1.8
16.	Almost never acts as leader Almost always acts as leader	4.8	1.4	3.5**	2.3	1.5	-7.2**
17.	Very gentle/very rough	2.8	1.3	-5.4**	5.0	1.5	4.4**
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	3.6	1.4	-1.7	4.6	1.9	2.3*
19.	Not at all dependent/very dependent	3.5	1.4	-2.1*	4.9	1.4	4.4**
20.	Very strong need for security Very little need for security	4.4	1.2	2.3*	3.3	1.4	-3.3**

Scores above 4 indicate more agreement with the term on the right.

*p<.05 **p<.01

TABLE 61
Paired *t*-test and ANOVA Results
Comparing Most Successful Female Students to
Least Successful Male Students by Male Teachers

Descriptor	*F*	*p*	*t*(78)	*p*
Aware of others' feelings	58.1	.0001	-6.8	.0001
Acts as leader	57.6	.0001	6.1	.0001
Self-confident	50.7	.0001	5.5	.0001
Gentle or rough	47.8	.0001	-7.8	.0001
Neat in habits	40.1	.0001	14.8	.0001
Easily influenced	36.3	.0001	5.3	.0001
Adventurous	25.5	.0001	4.5	.0001
Dependent	20.9	.0001	-3.4	.0014
Interested in appearance	19.3	.0001	-4.6	.0001
Need for security	15.7	.0002	4.4	.0001
Competitive	12.1	.0001	10.4	.0001
Aggressive	10.8	.0015	3.2	.0024
Quiet or loud	10.4	.0018	3.0	.0049
Objective	9.9	.0023	-2.5	.0172
Comfort with aggression	8.0	.0059	-3.7	.0007

F(1, 39)

Data were next examined by correlation and regression analysis. Descriptors were related in the several areas between most successful females and least successful males as described by male teachers. They were negatively related in independence, objectivity, emotion, self-confidence, quiet/loud, acts as leader, and dependence. They were positively related in the area of need for security (see Table 62).

TABLE 62
Correlation and Regression Analysis
Comparing Most Successful Female Students to
Least Successful Male Students by Male Teachers

Descriptor	Correlation	R^2	Regression F	p
Self-confident	-.556	.320	18.3	.0001
Dependent	-.544	.296	16.4	.0002
Independent	-.495	.245	11.4	.0018
Quiet or loud	-.453	.205	9.8	.0033
Acts as leader	-.432	.186	8.9	.0048
Emotional	-.352	.124	5.5	.0238
Objective	-.338	.114	5.0	.0307
Need for security	.332	.110	4.8	.0339
Gentle or rough	.249	.062		
Interested in appearance	.191	.036		
Aware of others' feelings	-.175	.031		
Easily influenced	-.153	.024		
Adventurous	-.154	.024		
Aggressive	.143	.020		
Comfort with aggression	.121	.015		
Dominant	.107	.011		
Talkative	-.085	.007		
Active	-.044	.002		
Competitive	.026	.001		
Neat in habits	-.038	.001		

Most Successful Females Compared to Least Successful Males by Female Teachers. Table 63 shows means, standard deviations, and *t*-test results for most successful female and least successful male students as described by female teachers. Least successful males were thought to be less aggressive, more subjective, more easily influenced by others, more passive, less emotional, less interested in their own appearance, less adventurous, less aware of others' feelings, less competitive, sloppier, less self-confident, louder, never acting as leaders, rougher, and more dependent than most successful females.

Descriptions given by female teachers for most successful female and least successful male students were also tested by ANOVA and two group paired *t*-tests. Table 64 shows statistically significant values.

TABLE 63
Descriptive Adjective Checklist: Relative Statistics and *t*-test by Term
Female Teachers - Most to Least Successful Students

		Most Successful Females			Least Successful Males		
		Mean	SD	*t*(39)	Mean	SD	*t*(47)
1.	Not aggressive/very aggressive	5.0	1.9	3.6**	3.7	2.3	-0.7
2.	Not independent/very independent	4.5	2.1	1.7	4.3	1.9	1.1
3.	Very objective/very subjective	4.0	1.6	-0.1	5.4	1.5	6.2**
4.	Very easily influenced/not easily influenced	5.8	1.2	10.2**	2.8	1.9	-4.2**
5.	Very submissive/very dominant	5.5	1.0	10.3**	4.9	1.7	3.7**
6.	Not at all talkative/very talkative	4.6	1.6	2.8**	4.3	2.2	1.0
7.	Very active/very passive	2.8	1.4	-5.9**	4.1	2.2	0.2
8.	Not at all emotional/very emotional	5.0	1.2	5.8**	3.5	1.9	-1.6
9.	Very interested in own appearance Not at all interested in own appearance	3.2	2.0	-2.5*	5.4	1.5	6.2**
10.	Not at all adventurous/very adventurous	5.4	1.0	9.4**	3.9	1.9	-0.5
11.	Very aware of others' feelings Not at all aware of others' feelings	3.2	1.8	-3.1**	5.0	1.7	3.8**
12.	Not very competitive/very competitive	5.7	1.3	8.9**	2.3	1.4	-7.8**
13.	Very sloppy in habits/very neat in habits	6.1	1.6	8.9**	2.4	1.5	-6.9**
14.	Not at all self-confident/very self-confident	6.1	0.9	15.5**	2.4	1.5	-7.0**
15.	Very loud/very quiet	4.0	1.7	0.2	3.1	2.2	-2.6*
16.	Almost never acts as leader Almost always acts as leader	5.5	1.5	7.2**	2.2	1.2	-9.7**
17.	Very gentle/very rough	3.2	1.5	-3.7**	5.3	1.6	5.3**
18.	Very uncomfortable about being aggressive Not at all uncomfortable about being aggressive	5.1	1.6	4.4**	5.4	1.8	5.1**
19.	Not at all dependent/very dependent	3.1	1.7	-3.6**	4.1	1.9	0.3
20.	Very strong need for security Very little need for security	4.5	1.5	2.2*	4.2	1.8	0.6

Scores above 4 indicate more agreement with the term on the right.
*p<.05 **p<.01

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TABLE 64
Paired *t*-test and ANOVA Results
Comparing Most Successful Female Students to
Least Successful Male Students by Female Teachers

Descriptor	*F*	*p*	*t*(94)	*p*
Self-confident	199.9	.0001	12.7	.0001
Competitive	139.7	.0001	12.5	.0001
Acts as leader	136.8	.0001	15.4	.0001
Neat in habits	125.6	.0001	14.5	.0001
Easily influenced	80.8	.0001	9.9	.0001
Gentle or rough	41.7	.0001	-7.9	.0001
Interested in appearance	32.7	.0001	-5.6	.0001
Aware of others' feelings	24.0	.0001	-4.8	.0001
Adventurous	23.1	.0001	7.2	.0001
Objective	19.2	.0001	-5.2	.0001
Emotional	18.9	.0001	4.4	.0001
Active	11.0	.0013	-3.3	.0020
Aggressive	8.2	.0052	3.5	.0010
Dependent	6.7	.0112	-2.3	.0254
Quiet or loud	5.0	.0275	2.7	.0098

F(1, 47)

Data were next examined by correlation and regression analysis. Most successful female student descriptions were negatively related to least successful male descriptions for dominance, and dependency. They were positively related in areas of adventurousness and gentleness/roughness as shown in Table 65.

TABLE 65
Correlation and Regression Analysis
Comparing Most Successful Female Students to
Least Successful Male Students by Female Teachers

Descriptor	Correlation	R^2	Regression F	p
Adventurous	0.629	0.395	27.5	.0001
Dependent	-0.453	0.205	10.8	.0020
Dominant	-0.358	0.128	6.2	.0171
Gentle or rough	0.333	0.111	5.2	.0274
Talkative	0.288	0.083		
Self-confident	-0.270	0.073		
Acts as leader	0.270	0.073		
Emotional	-0.257	0.066		
Quiet or loud	0.210	0.044		
Need for security	-0.201	0.040		
Objective	0.193	0.037		
Interested in appearance	-0.192	0.037		
Independent	0.179	0.032		
Neat in habits	0.143	0.021		
Aggressive	0.097	0.009		
Easily influenced	0.084	0.007		
Active	0.081	0.007		
Comfort with aggression	0.046	0.002		
Aware of others' feelings	0.015			
Competitive	-0.016			

Summary of Findings. Table 66 compares ranked correlations by male and female teachers when describing most successful male and least successful female students.

TABLE 66
Correlation Coefficients of Male and
Female Teachers Describing Most Successful
Male in Relation to Least Successful Female Students

Male Teachers		Female Teachers	
.466	Need for security	-.604	Gentle or rough
.412	Acts as leader	-.530	Dominant
-.386	Dependent	-.459	Comfort with aggression
.376	Comfort with aggression	-.398	Quiet or loud
-.371	Objective	-.328	Talkative
.327	Easily influenced		
.304	Self-confident	-.298	Aggressive
-.302	Talkative	-.233	Neat in habits
		-.205	Emotional
.255	Neat in habits	-.186	Aware of others' feelings
-.250	Competitive	.168	Need for security
-.197	Active	.149	Objective
-.190	Interested in appearance	.130	Independent
-.167	Dominant	-.093	Easily influenced
-.155	Aware of others' feelings	-.090	Active
.145	Emotional	-.072	Acts as leader
-.113	Adventurous	-.039	Dependent
-.101	Independent	.026	Adventurous
.091	Gentle or rough	-.012	Interested in appearance
-.006	Aggressive		Competitive
	Quiet or loud		Self-confident

Table 67 compares ranked correlations by male and female teachers when describing most successful female and least successful male students.

TABLE 67
Correlation Coefficients of Male and
Female Teachers Describing Most Successful
Female in Relation to Least Successful Male Students

Male Teachers		Female Teachers	
-.598	Objective	.629	Adventurous
-.488	Dependent	-.453	Dependent
-.462	Independent	-.358	Dominant
-.435	Need for security	.333	Gentle or rough
.370	Aware of others' feelings		
.341	Emotional	.288	Talkative
-.325	Adventurous	-.270	Self-confident
.318	Acts as leader	.270	Acts as leader
		-.257	Emotional
-.271	Aggressive	.210	Quiet or loud
.250	Neat in habits	-.201	Need for security
-.218	Competitive	.193	Objective
-.162	Quiet or loud	-.192	Interested in appearance
-.138	Easily influenced	.179	Independent
.122	Self-confident	.143	Neat in habits
-.107	Talkative	.097	Aggressive
.055	Comfort with aggression	.084	Easily influenced
-.041	Dominant	.081	Active
-.049	Active	.046	Comfort with aggression
-.033	Interested in appearance	.015	Aware of others' feelings
-.028	Gentle or rough	-.016	Competitive

Table 68 shows statistically significant ANOVA values derived from analysis of male and female teacher descriptions of most successful male compared to least successful female students. The top three values are similarly ranked by both male and female teachers.

TABLE 68
ANOVA's Factoring for Student Sex Comparing Descriptors Given by Male and Female Teachers of Most Successful Male in Relation to Least Successful Female Students

Male Teachers	*F*	Female Teachers	*F*
Self-confident	172.1	Self-confident	283.2
Competitive	156.6	Competitive	167.3
Acts as leader	108.0	Acts as leader	117.4
Neat in habits	48.0	Easily influenced	84.1
Adventurous	46.0	Need for security	70.4
Easily influenced	23.6	Emotional	50.1
Emotional	12.7	Dependent	41.2
Aware of others' feelings	11.8	Neat in habits	39.5
Aggressive	11.7	Gentle or rough	20.9
Dependent	7.9	Aware of others' feelings	14.9
Need for security	7.7	Dominant	11.5
Dominant	7.0	Adventurous	10.9
		Objective	6.3
		Quiet or loud	5.3
F(1, 39)		*F*(1, 47)	

Table 69 lists statistically significant ANOVA values derived from analysis of male and female teacher descriptions of most successful female compared to least successful male students.

TABLE 69
ANOVA's Factoring for Student Sex Comparing Descriptors Given by Male and Female Teachers of Most Successful Female in Relation to Least Successful Male Students

Male Teachers	*F*	Female Teachers	*F*
Aware of others' feelings	58.1	Self-confident	199.9
Acts as leader	57.6	Competitive	139.7
Self-confident	50.7	Acts as leader	136.8
Gentle or rough	47.8	Neat in habits	125.6
Neat in habits	40.1	Easily influenced	80.8
Easily influenced	36.3	Gentle or rough	41.7
Adventurous	25.5	Interested in appearance	32.7
Dependent	20.9	Aware of others' feelings	24.0
Interested in appearance	19.3	Adventurous	23.1
Need for security	15.7	Objective	19.2
Competitive	12.1	Emotional	18.9
Aggressive	10.8	Active	11.0
Quiet or loud	10.4	Aggressive	8.2
Objective	9.9	Dependent	6.7
Comfort with aggression	8.0	Quiet or loud	5.0
F(1,39)		*F*(1,47)	

Differences in Teachers' Attributions for Causation of Success and Lack of Success for Male and Female Students

The third research question addressed in this study was "Do teachers attribute causation of success and lack of success differently for male and female students?" The following data were obtained from the qualitative portion of the questionnaire which included a set of open-ended questions asking teachers to provide written descriptions of their most and least successful female students. Responses fell into several broad categories for most and least successful students.

Teachers' Attributions for Causation of Success

Teachers' responses indicating attributions for causation of were characterized as those who were involved in school-related activities, put forth effort, had family support, were goal oriented, had good interpersonal skills, had good study habits, were independent and intelligent, had a positive attitude, held positive self-esteem, were quiet and responsible/mature, and were self-motivated. Tables 70 through 73 indicate the frequency of responses given in each catagory for either most successful males or most successful females by male and female teachers. Table 74 summarizes response frequencies of all teachers in categories used to describe all most successful students.

TABLE 70
Response Frequency of Male Teachers in
Categories Used to Describe Most Successful Male Students

Response Category	Response Frequency
Puts forth effort	25
Self-motivated	14
Positive self-esteem	13
Attentive	11
Curious/Interested	10
Good study habits	10
Good interpersonal skills	9
Family support	6
Intelligence	6
Goal oriented	5
Competitive	4
Independent	4
Positive attitude	4
Responsible/Mature	4
Assertive	0
Quiet	0

TABLE 71
Response Frequency of Male Teachers in
Categories Used to Describe Most Successful Female Students

Response Category	Response Frequency
Puts forth effort	26
Good study habits	14
Curious/Interested	13
Positive attitude	12
Attentive	11
Good interpersonal skills	9
Positive self-esteem	9
Self-motivated	9
Responsible/Mature	8
Family support	6
Goal oriented	6
Assertive	4
Intelligent	4
Competitive	2
Independent	2
Quiet	0

TABLE 72
Response Frequency of Female Teachers in
Categories Used to Describe Most Successful Male Students

Response Category	Response Frequency
Self-motivated	19
Good study habits	18
Attentive	15
Puts forth effort	15
Positive self-esteem	15
Quiet	10
Intelligent	9
Competitive	6
Independent	6
Assertive	5
Curious/Interested	4
Family support	4
Good interpersonal skills	3
Goal oriented	2
Positive attitude	2
Responsible/Mature	2

TABLE 73
Response Frequency of Female Teachers in
Categories Used to Describe Most Successful Female Students

Response Category	Response Frequency
Good study habits	32
Puts forth effort	31
Curious/Interested	21
Intelligent	16
Attentive	15
Good interpersonal skill	13
Positive attitude	11
Positive self-esteem	10
Independent	9
Assertive	7
Family support	7
Competitive	6
Responsible/Mature	6
Goal oriented	4
Self-motivated	2
Quiet	0

Table 74
Summary of Response Frequencies of All Teachers
in Categories Used to Describe All Most Successful Students

Response Category	Male Teachers MSM	Male Teachers MSF	Female Teachers MSM	Female Teachers MSF
Assertive	0	4	5	7
Attentive	11	11	15	15
Competitive	4	2	6	6
Curious/Interested	10	13	4	21
Puts forth effort	25	26	15	31
Family support	6	6	4	7
Goal oriented	5	6	2	4
Good interpersonal skills	9	9	3	13
Good study habits	10	14	18	32
Independent	4	2	6	9
Intelligent	6	4	9	16
Positive attitude	4	12	2	11
Positive self-esteem	13	9	15	10
Quiet	0	0	10	0
Responsible/Mature	4	8	2	6
Self-motivated	14	9	19	2

MSM = Most successful males MSF = Most successful females

Typical responses given within each category were as follows:

1) Assertive: determination, tenacity.

2) Attentive: asked and answered questions, class participation, focused, not easily distracted, regular attendance.

3) Competitive: aggressive, ambition, power, prestige, straight 100's, trying to be the best.

4) Curious/Interested: an open mind, even the most (seemingly) mundane tasks became interesting because they wanted to do them, inquisitive, interested in learning and achieving, knew what they wanted, questioning until they understood, stickler for details, willing to ask questions.

5) Puts forth effort: good work ethic, hard working, industrious, overachiever, read books on their own that haven't been assigned, they enjoyed the class and took their work seriously, willing to work.

6) Family support: concerned parents, good family, positive support from parents, these students also had family support and expectation levels.

7) Goal oriented: focused on a goal, had a goal, well defined goals.
8) Good interpersonal skills: extremely pleasant, sensitive, they are cooperative, they were people oriented, thoughtful and considerate, used "teacher pleasing" behaviors, well liked and respected by peers.
9) Good study habits: ability to work independently, always did homework, conscientious, know how to take noted and study, neatness of work, they read constantly, very disciplined, willing to revise written work, work completed on time well organized.
10) Independent: despite peer pressure to conform, independent, marched to beat of own drum, not necessarily joiners, pursued own interests.
11) Intelligent: ability to relate, recall, and make comparisons, God given intelligence, good math knowledge, imaginative and creative, insightfulness, logical mind, uninhibited.
12) Positive attitude: enthusiasm, happy, respect for education, student values an education, valued importance of education.
13) Positive self-esteem: confident bordering on cocky, didn't care what others thought of him or his appearance, high self-esteem, less need for teacher approval, not afraid to be different, nothing was impossible, self-assured, self-confident.
14) Quiet: introverted, not one of the "jocks", quiet, relatively quiet.
15) Responsible/Mature: mature, maturity, take assignments seriously.
16) Self-motivated: didn't need teacher direction but appreciated teacher approval, highly motivated, loved to learn, personal determination to do well and accomplish goals, self-directed, liked to learn, study to learn not just pass the test, wanted to do well.

Broad categories of teacher responses to the questionnaire were grouped and sorted as described above. In addition, the frequency of words or phrases used under a specific category was determined. The following tables show broad categories, frequency

of responses, total number of times the description was used by both male and female teachers, and difference in number of responses used to describe most successful male and female students.

Table 75 shows a parallel view of male teacher descriptions of most successful male and female students. Only two categories with differences in responses of 5 or more were found. Most successful females were more often described as having a positive attitude and most successful males were more often described as being self-motivated.

TABLE 75
Male Teachers Describing Most Successful Students

Response Category	MSM	MSF	Total	Diff.
Puts forth effort	25	26	51	1
Good study habits	10	14	24	4
Curious/Interested	10	13	23	3
Self-motivated	14	9	23	5
Attentive	11	11	22	0
Positive self-esteem	13	9	22	4
Good interpersonal skills	9	9	18	0
Positive attitude	4	12	16	8
Family support	6	6	12	0
Responsible/Mature	4	8	12	4
Goal oriented	5	6	11	1
Intelligent	6	4	10	2
Competitive	4	2	6	2
Independent	4	2	6	2
Assertive	0	4	4	4
Quiet	0	0	0	0

MSM = Most successful males MSF= Most successful females

Table 76 shows the number of responses given by female teachers in describing most successful students. Most successful female students were more often than males described as those who were curious, exerted effort, had good interpersonal skills and good study habits, were intelligent, and a positive attitude. Males were described more often as being quiet, having high self-esteem, and being self motivated. In this section of the survey, responses in the "quiet" category were given only by female teachers when describing most successful males.

TABLE 76
Female Teachers Describing Most Successful Students

Response Category	MSM	MSF	Total	Diff.
Good study habits	18	32	50	14
Puts forth effort	15	31	46	16
Attentive	15	15	30	0
Curious/Interested	4	21	25	17
Intelligent	9	16	25	7
Positive self-esteem	15	10	25	5
Self-motivated	19	2	21	17
Good interpersonal skill	3	13	16	10
Independent	6	9	15	3
Positive attitude	2	11	13	9
Assertive	5	7	12	2
Competitive	6	6	12	0
Family support	4	7	11	3
Quiet	10	0	10	10
Responsible/Mature	2	6	8	4
Goal oriented	2	4	6	2

MSM= Most successful males MSF= Most successful females

Data were also examined to determine if there were differences in the way both male and female teachers described most successful males. Table 77 shows the number of responses and the differences in numbers of responses between male and female teachers. Male teachers gave 5 or more responses than female teachers in areas of curiosity, effort, and good interpersonal skills when describing most successful male students. Female teachers' responses fell under the categories of good study habits, self-motivation, and quiet more frequently than male teachers' responses.

Table 77
Comparison of Male and Female
Teacher Responses - Most Successful Males

Response Category	MT	FT	Diff.
Puts forth effort	25	15	10
Quiet	0	10	10
Good study habits	10	18	8
Curious/Interested	10	4	6
Good interpersonal skills	9	3	6
Assertive	0	5	5
Self-motivated	14	19	5
Attentive	11	15	4
Goal oriented	5	2	3
Intelligent	6	9	3
Competitive	4	6	2
Family support	6	4	2
Independent	4	6	2
Positive attitude	4	2	2
Positive self-esteem	13	15	2
Responsible/Mature	4	2	2

MT = Male teachers FT = Female teachers

Table 78 shows the number of responses and the differences in numbers of responses between male and female teachers describing most successful females. The only area in which male teachers responded more frequently than female teachers was self-motivation. Female teachers' responses fell under the categories of curious, effort, good study habits, intelligence and independence as qualities of most successful female students more frequently than male teachers.

Table 78
Comparison of Male and Female
Teacher Responses - Most Successful Females

Response Category	MT	FT	Diff.
Good study habits	14	32	18
Intelligent	4	16	12
Curious/Interested	13	21	8
Independent	2	9	7
Self-motivated	9	2	7
Puts forth effort	26	31	5
Attentive	11	15	4
Competitive	2	6	4
Good interpersonal skill	9	13	4
Assertive	4	7	3
Goal oriented	6	4	2
Responsible/Mature	8	6	2
Family support	6	7	1
Positive attitude	12	11	1
Positive self-esteem	9	10	1
Quiet	0	0	0

MT = Male teachers FT = Female teachers

A number of responses did not fall into any of the identified categories, e.g., argumentative, boys have fewer obstacles to overcome such as the societal expectations women must endure, females in our area must overcome expectations of traditional roles in order to achieve other goals, and not concerned with grades.

Teachers' Attributions for Causation of Lack of Success

Teachers' responses indicating attributions for causation of student lack of success fell into several categories. Least successful students were characterized by responses which fell into the categories of lack of effort, lack of interest, low confidence/self-esteem, macho, no focus, no parental support, poor attitude, poor skills/study habits, and social behaviors Tables 79 through 82 indicate the frequency of responses given in each category for either least successful males or least successful females by male and female teachers. Table 83 summarizes response

frequencies of all teachers in categories used to describe all least successful students.

TABLE 79
Response Frequency of Male Teachers in
Categories Used to Describe Least Successful Male Students

Response Category	Response Frequency
Lack of effort	25
Lack of interest	20
Inappropriate social behaviors	14
Low confidence/self-esteem	7
No parental support	7
Poor skills/Study habits	7
Macho attitude	6
No focus	4
Poor attitude	4

TABLE 80
Response Frequency of Male Teachers in
Categories Used to Describe Least Successful Female Students

Response Category	Response Frequency
Lack of interest	28
Lack of effort	21
Inappropriate social behaviors	10
Low confidence/self-esteem	9
Macho attitude	8
No parental support	8
Poor skills/Study habits	7
No focus	0
Poor attitude	0

TABLE 81
Response Frequency of Female Teachers in
Categories Used to Describe Least Successful Male Students

Response Category	Response Frequency
Lack of interest	31
Poor attitude	26
Inappropriate social behaviors	24
Poor skills/Study habits	23
Lack of effort	19
Macho attitude	8
No focus	5
Low confidence/self-esteem	2
No parental support	2

TABLE 82
Response Frequency of Female Teachers in
Categories Used to Describe Least Successful Female Students

Response Category	Response Frequency
Inappropriate social behaviors	39
Lack of interest	20
Low confidence/self-esteem	18
Poor skills/Study habits	18
Lack of effort	17
Macho attitude	9
No parental support	6
No focus	0
Poor attitude	0

Table 83
Summary of Response Frequencies of All Teachers
in Categories Used to Describe All Least Successful Students

	Male Teachers		Female Teachers	
Response Category	LSM	LSF	LSM	LSF
Lack of effort	25	21	19	17
Lack of interest	20	28	31	20
Low confidence/self-esteem	7	9	2	18
Macho attitude	6	8	8	9
No focus	4	0	5	0
No parental support	7	8	2	6
Poor attitude	4	0	26	0
Poor skills/Study habits	7	7	23	18
Inappropriate social Behaviors	14	10	24	39

LSM = Least successful males LSF = Least successful females

Typical responses given within each category are as follows:
1) Lack of effort: are not willing to work for anything, incomplete work, lack of self-discipline, lack of studying, lazy, low motivation to try, never did homework, no effort in studying, not interested in putting necessary time in to succeed, refusing to attempt work, they did not do the assigned work.
2) Lack of interest: after they got behind they gave up, always had an excuse, apathy and low opinion of math, disinterested in learning or exploring, inattentiveness in class, lack of motivation, late or skipped classes, lethargy, mind elsewhere, not

caring, short or little attention span the guys seemed to care less as a group, the least successful

3) Low confidence/self-esteem: low self-esteem, need for security, negative self-concept, the attitude that "If I'm too smart, I won't be liked.", the attitude that "If I'm too successful, I won't be liked.", unsure, zero self-worth.

4) Macho attitude: Male students - a "Don Juan", a pregnancy made him successful in his own eyes, all the girls flocked after him, egocentric, male ego, preoccupation with getting laid, they were interested only in cars, beer, and women. Females students - heads between their legs, more interested in appearance, most of these girls were convinced they were placed on earth to wife and mother, completely separated from life itself, motherhood and marriage primary goal, preoccupation with sexually attractive boys in school,they were boy-crazy, they were too worried about looks, and make-up, etc. to study.

5) No focus: confused most of the time, in class without a clue why they're there - "like ducks out of water" - not ability problems just no point of reference, unfocused.

6) No parental support: born trash and got worse, lack of an adult role model, lack of guidance, lack of positive home environment, no family support or expectation, some young ladies have no adult supervision and are allowed to run their own lives, the boys are permitted to do what every and there are no restrictions on them, unconcerned parents, very poor home environment.

7) Poor attitude: class not important, education not valued or important to them, feeling they don't need an education - they'll just work on the farm or wherever dad does, for the present he is content in a minimum wage job that does not require a diploma, "guys shouldn't work", hated school, hated to read, cocky attitude, he acts like he enjoys failure, many of them see themselves as being cool because they don't do any schoolwork, the attitude that "I'm here to have a good time", there were jobs in the coal mine which paid twice as much as a teacher's job and a

teacher was one of the few educated people they encountered, these guys faltered because they saw no advantage to education.

8) Poor skills/study habits: cannot read well at all, doesn't write well, he's very sloppy, he relies on me to read his papers, tests, questions to stories, incomplete or sloppy work, lack of successful study skills, not being able to read well hinders his self-confidence, they couldn't be bothered to bring a pencil to class, let alone paper and book, low ability to comprehend and apply. very slow worker-frequently didn't get finished.

9) Inappropriate social behaviors: argumentative/hostile, classroom problem, discipline problems, disrespectful of just about anyone (teachers, peers, parents), distracted by boys, immature, identifying with the wrong type of crowd, introvert and not socially mixing with others, loud, more concerned about social problem, never smile (usually), over board with visiting and interacting, peer pressure, playing around to get attention, poor choices of relationships, preoccupation with drugs, alcohol and rock music, she made a concerted effort to be a "hood", shy, social life takes up too much time, spend too much time writing notes (non-academic) to each other instead of working in class, spend too much time talking about who's dating whom, talkative, they didn't have time to study because of their constant dates and not writing, they were cocky and tried to intimidate me (and other teachers), too concerned with peers, not being able to get along with people, usually school takes a back seat to boys and an active social life, very belligerent, violent behavior (halls and home).

Broad categories of teacher responses to the questionnaire were grouped and sorted as described above. In addition, the frequency of words or phrases used under a specific category was determined. The following tables show broad categories, frequency of responses, total number of times the description was used by both male and female teachers, and difference in number of responses used to describe least successful male and female students.

Table 84 shows a parallel view of male and female teacher descriptions of least successful students. Only two categories with differences in responses of 5 or more were found. Male teachers gave 5 or more responses more than female teachers in the following areas: lack of effort, low-confidence, and no parental support. Female teachers responded in categories of lack of interest, poor attitude, poor skills/study habits and social behaviors more than did male teachers.

Table 84
Male and Female Teachers Describing Least Successful Students

Response Category	MT	FT	Total	Diff.
Lack of interest	20	31	51	11
Lack of effort	25	19	44	6
Inappropriate social behaviors	14	24	38	10
Poor attitude	4	26	30	22
Poor skills/Study habits	7	23	30	16
Macho attitude	6	8	14	2
Low confidence/self-esteem	7	2	9	5
No focus	4	5	9	1
No parental support	7	2	9	5

MT = Male teachers FT = Female teachers

Table 85 shows results for least successful female students. Male teachers responded in the lack of interest category 5 or more times more than female teachers. Female teachers responded in categories of low confidence, poor skills/study habits, and social behaviors more frequently than male teachers.

Table 85
Male Teachers Describing Least Successful Females

Response Category	MT	FT	Total	Diff.
Inappropriate social behaviors	10	39	49	29
Lack of interest	28	20	48	8
Lack of effort	21	17	38	4
Low confidence/self-esteem	9	18	27	9
Poor skills/Study habits	7	18	25	11
Macho attitude	8	9	17	1
No parental support	8	6	14	2

MT = Male teachers FT = Female teachers

Table 86 shows the number of responses made by male teachers when describing both least successful male and female students. Male teachers referred to least successful females as showing lack of interest eight more times than male students. There were no other categories with large differences.

Table 86
Male Teachers Describing Least Successful Students

Response Category	LSM	LSF	Total	Diff
Lack of interest	20	28	48	8
Lack of effort	25	21	46	4
Inappropriate social behaviors	14	10	24	4
Low confidence/self-esteem	7	9	16	2
No parental support	7	8	15	1
Macho attitude	6	8	14	2
Poor skills/Study Habits	7	7	14	0
Poor attitude	4	0	4	4
No focus	4	0	4	4

LSM = Least successful males LSF = Least successful females

Table 87 shows the number of responses made by female teachers when describing both least successful male and female students. The greatest number of comments used to describe least successful students fell into the category of inappropriate social behaviors, followed by lack of interest, poor skills and poor attitude. Female teachers commented much more frequently (26:0) about least successful males' poor attitudes and least successful females' low confidence (18:2).

Table 87
Female Teachers Describing Least Successful Students

Response Category	LSM	LSF	Total	Diff
Inappropriate social behaviors	24	39	63	15
Lack of interest	31	20	51	11
Poor skills/Study habits	23	18	41	5
Lack of effort	19	17	36	2
Poor attitude	26	0	26	26
Low confidence/self-esteem	2	18	20	16
Macho	8	9	17	1
No parental support	2	6	8	4
No focus	5	0	5	5

LSM = Least successful males LSF = Least successful females

A number of responses did not fall into any of the identified categories, e.g., confused most of the time, difficulty dealing with the stress of competition, does not want to succeed, uses drugs, easily frustrated, fear of being different, futility, hopelessness, "hyper", and inability to retain information.

Summary of Findings

In this study, over half of the female teachers and a third of the male teachers reported female students to be more successful in all academic areas. Male students were thought to be more successful only in traditional male courses such as woodworking and drafting. A much larger percentage of female teachers chose female students as being more successful than did male teachers, whose largest percentage reported no difference. Female teachers also reported a much smaller percentage of male successful students (13%) than did male teachers (26%).

Male and female teachers agreed upon some characteristics of most successful and least successful students. Most successful male students were described as being not easily influenced, talkative, active, adventurous, competitive, neat, self-confident, acting as leaders, gentle, and with little need for security.

Teachers agreed on the following characteristics of most successful female students: aggressive, not easily influenced, dominant, active, emotional, interested in their own appearance, aware of other's feelings, competitive, neat, self-confident, one who acts as leader, gentle, not dependent, with little need for security.

Least successful male students were described by both male and female teachers in ten areas. They were described as being subjective, easily influenced, not interested in their own appearance, not aware of the feelings of others, not competitive, sloppy, not self-confident, never acting as leaders, rough, and not uncomfortable with aggression.

Teachers were in least agreement with descriptions of least successful female students with only six areas agreed upon. Least

successful female students were described as being easily influenced, emotional, not aware of feelings of others, not competitive, never acting as leaders, and dependent.

In general, most successful students had traits that were masculine-poled, masculine-valued and feminine-poled feminine-valued. Least successful students had traits that were feminine-poled, masculine-valued and masculine-poled, feminine-valued. Most successful male students were identified as having six masculine-poled traits and three feminine-poled traits. Five of the descriptions were male-valued items, four were female-valued.

Most successful female students were described as having ten masculine-poled traits and feminine-poled traits. Ten of the adjective-pairs are male-valued traits; six are female-valued traits.

Least successful male students were described with feminine-poled traits of masculine-valued descriptors and masculine-poled traits of feminine-valued descriptors in nine of the ten areas of agreement in teacher surveys.

Least successful female students were similarly described. They exhibited feminine-poled behaviors in male-valued traits and masculine-poled behaviors in female-valued terms.

When teachers replied to open-ended survey questions, the reason for success given most often for both male and female students was effort followed by self-motivation, positive self-esteem, interest, paying attention, and good study habits. The trait of being assertive was only mentioned regarding female students. Having a positive attitude, being mature and using good study habits were listed more frequently for females than males, whereas males were listed as being self-motivated and possessing good self-esteem more often than females.

Correlation and regression analysis revealed similarities in how male and female teachers described most successful students. The analysis also disclosed that male and female teacher descriptions were significantly different in many areas. ANOVA and paired *t*-tests also revealed many areas of disagreement both

in how teachers described most and least successful male and female students and in how they ranked behaviors.

IMPLICATIONS

Most educational research groups teachers or students of the same sex into one category, based on the assumption that males and females think and respond in the same way. This study indicates that these assumptions may be erroneous in that male and female teachers gave significantly different responses when asked to describe most and least successful male and female students. If, in fact, research guides practice, then findings based upon data that fails to consider sex as a variable may be inaccurate.

Attribution theory suggests that teachers respond to student behavior based upon their own beliefs regarding the causation of behavior. The findings of this study imply that male and female students are receiving different educational experiences based upon a combination of their own ability and what their teacher(s) believe to be appropriate gender-based behavior. If this is the case, then educators should be made aware of any sex-biases which influence their behavior toward students and schools should provide students with a balance of male and female teachers from K-12. Our challenge becomes to redefine equality in education mean equity of educational opportunity.

Male and female teachers use different values to describe male and female students. Teachers have belief systems which have formed over their lifetimes. These beliefs will not normally change regardless of the amount of evidence that proves the inaccuracy of these beliefs (Abelson, 1979; Lewis, 1990; Nespor, 1987; Nisbett & Ross, 1980; Posner, Strike, Hewson, & Gertzog, 1982; Rokeach, 1968). There is a compelling amount of evidence that teachers treat and view males and females differently in the classroom (Fennema et al., 1990, Sadker & Sadker, 1984). If teachers attribute different causations to success and failure of male and female students based on the teacher's belief system,

then the students will receive different educations depending upon how the teacher perceives and reacts to student performance.

This study demonstrates that male and female teachers have different beliefs as to which students are successful and which students are not. A general implication can be made that male teachers find it easier to describe successful and nonsuccessful behaviors in male students and female teachers find it easier to describe successful and nonsuccessful attributes of female students. Female teachers seem more sensitive to issues of aggression than male teachers. As we attempt to reform our educational system, we should at least consider whether some classes should be all male (including the teacher), and some classes all female.

This researcher found there are insufficient numbers of male teachers in the lower elementary school level (K-3) to obtain meaningful data about beliefs and attitudes. It is during this time frame when students are developing life-long personality patterns. Since many of our young children have no male model at home they must search for models outside the home. The most visible men in this society are rock stars, athletes and movie stars. If we want young males to have role models of their own sex who exhibit more temperate behavior, then the system must be changed so that male teachers are present in early elementary school. At a time when our society supports the introduction of women into traditional male occupations, we should also be supporting the introduction of men into traditional female roles.

Another implication of this study is that male and female teachers may be treating students in ways that are enculturated by the teacher. If this is so, and the belief system of teachers is relatively stable, then the only way to change the system would be a radical change in educational delivery and philosophy. If the behaviors of teachers are affected by their beliefs, then the reasons teachers attribute to student behaviors and attitudes affect the way the teacher responds. If a teacher has no socio/economic/ cultural background in common with students, then the teacher is required to guess what the reason for a behavior

might be and respond accordingly. One student's behavior may be considered quiet in one school and pushy in another depending upon the belief structure of the educational environment.

The frustration felt by many students in our education system becomes more understandable by considering the implications of this study. Behaviors such as being a supportive person, being able to listen compassionately, or being a caring individual were not used by any of the respondents to this survey to describe successful students. The ability to work cooperatively was cited only once. At a time when business is moving toward cooperativeness in the work place, our education system is measuring success with assertiveness and competition.

Perhaps Glasser (1986) best summarizes the educational climate in which teachers who responded to this survey find themselves:

> ... a good school is defined as a place where almost all students believe that if they do some work, they will be able to satisfy their needs enough so that it makes sense to keep working ... Defined this way, very few secondary schools are good schools because these schools, following traditional s-r reasoning, do not have either student or teacher satisfaction as a major goal ... Based on the false assumption that all students want to learn what is taught, the goal of most schools is to concentrate on both teaching and directing students without taking into sufficient account whether what is done is satisfying to students or teachers. (p. 15)

A major task in educational reform is to determine what our goals are and how best to reach those goals. Treating boys and girls the same is not a realistic educational goal. Teachers believe that their students have predestined behaviors. They also believe that students exhibit behavioral traits that determine success and failure. The beliefs, and therefore the behaviors, of teachers cannot be changed without changing the system of education. If teachers believe that they have no control over the educational fate of their students, then they will deal with their students entirely differently than if they feel that they have some control. A realistic educational goal for gender issues is to make educators more aware of differences between both teachers

and students. All of our teachers and students must be considered as individuals with beliefs and attitudes that influence success.

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